SAMSUNG

GSM Mobile Cellular Phone

SGH-500

SERVICE Manual

GSM Mobile Cellular Phone

CONTENTS

1. Exploded Views and Parts List
2. Electrical Parts List
3. Block Diagram
4. PCB Views
5. Schematic Diagrams

ELECTRONICS

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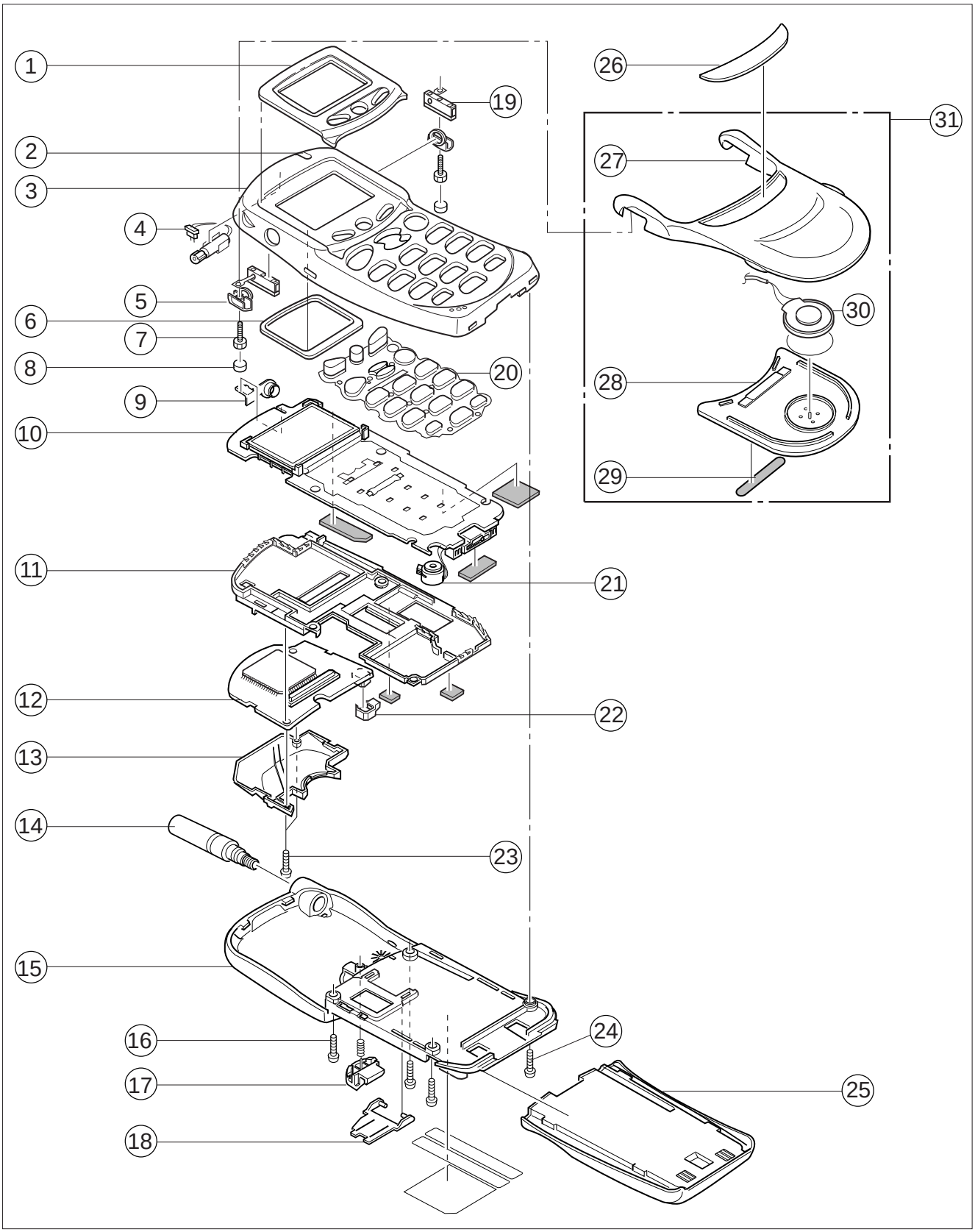
1. Exploded View and Parts List

1-1 Main Exploded View



1-2 Main Exploded View Parts List

No.	Description	SEC Code			Remark
		Dark Gray	Deep Blue	Stone Gray	
1	WINDOW	GH72-41659A	GH72-41659C	GH72-41659B	
		GH72-41659D	GH72-41659F	GH72-41659Z	CHINA
2	REFLECTOR-LED	GH72-41653A	GH72-41653A	GH72-41653A	
3	FRONT COVER	GH75-11254A	GH75-11254B	GH75-11254C	
4	VIBRATOR	GH59-10069A	GH59-10069A	GH59-10069A	
5	FLIP DUMMY-L/R	GH72-41455G/H	GH72-41455J/K	GH72-41455E/F	
6	SPONGE BUMPER	GH74-10717A	GH74-10717A	GH74-10717A	
7	SCREW-MACHINE(M1.4/L3.5)	6001-001155	6001-001155	6001-001155	
8	FLIP DUMMY(RUBBER)	GH73-40658A	GH73-40658E	GH73-40658F	
9	ANTENNA BRACKET	GH71-10713A	GH71-10713A	GH71-10713A	
10	MAIN B'D	GH94-00809A	GH94-00809A	GH94-00809A	
		GH92-00737A	GH92-00737A	GH92-00737A	CHINA
11	SHIELD-MAIN	GH72-41657A	GH72-41657A	GH72-41657A	
12	MEMORY B'D	GH94-00854A	GH94-00854A	GH94-00854A	
		GH92-00738A	GH92-00738A	GH92-00738A	CHINA
13	SHIELD-LOGIC	GH72-41658A	GH72-41658A	GH72-41658A	
14	ANTENNA	GH42-00001A	GH42-00001A	GH42-00001A	
		GH42-00011A	GH42-00011A	GH42-00011A	CHINA
15	REAR COVER	GH72-41662A	GH72-41662A	GH72-41662A	
16	SCREW-MACHINE(L2/L3.5)	6001-001149	6001-001149	6001-001149	
17	BATTERY LOCKER	GH72-41663A	GH72-41663A	GH72-41663A	
18	CARD HOLDER	GH72-41664A	GH72-41664A	GH72-41664A	
19	FLIP BRACKET-L/R	GH75-11146A/B	GH75-11146A/B	GH75-11146A/B	
20	KEYPAD	GH72-41661A	GH72-41661A	GH72-41661A	
21	MIC HOLDER	GH72-41656A	GH72-41656A	GH72-41656A	
22	BUZZER HOLDER	GH73-40694A	GH73-40694A	GH73-40694A	
23	SCREW-TAPTIGHT(M1.4x4)	6003-001049	6003-001049	6003-001049	
24	SCREW-MACHINE(M2/L5)	6001-001148	6001-001148	6001-001148	
25	BATTERY	GH43-10091A	GH43-10089A	GH43-10101A	Slim(600 mA)
		GH43-10093A	GH43-10090A	GH43-10097A	Middle(900 mA)
		GH43-10328A	GH43-10327A	GH43-10329A	Long(1600 mA)
26	FLIP WINDOW	GH72-41660A	GH72-41660C	GH72-41660B	
		GH72-41660D	GH72-41660F	GH72-41660E	CHINA
27	FLIP UPPER	GH72-41654A	GH72-41654B	GH72-41654C	
28	FLIP LOWER	GH72-41655A	GH72-41655B	GH72-41655C	
29	FLIP LABEL	GH68-31050D	GH68-31050E	GH68-31050F	
30	SPEAKER	3009-001024	3009-001024	3009-001024	
31	FLIP ASS'Y	GH97-00838A	GH97-00838B	GH97-00838C	

2. Electrical Parts LIST

2-1 Main Parts List (Europe)

Location No.	Description	SEC Code	Remark
RDS161	SWITCH-REED 200 V, 0.5A, -, -	3409-001002	
BAT201	BATTERY-POLYMER 3.3 V, 0.065 mAH	4302-001026	
J161	DISPLAY LCD SGH-500, UG-09A12-FLHTX-B	GH07-20533A	
SEMI-CABLE	CBF SIG NAL- SGH-500, COAXIAL	GH39-20017A	
METALDOM	UNIT-KEY ARRAY SGH-500, YOU07d	GH59-10168A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE SPONGE	GH63-20056A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE SPONGE	GH63-20058A	
-	NPR-ANT.BRACKET SGH-500, CUZN, T0.5, AU	GH71-10713A	
BACKUP-TAPE	MCT-BACKUP TAPE SGH-600, TAPE	GH74-40518A	
-	PRA AUTO SMD-SGH-500, SEUK, UK	GH94-00809A	
D202	DIODE-ZENER UDZ3.0B, 3.0 V, 3.01-3.22 V	0403-001166	
D241, D242	DIODE-SCHOTTKY PRLL5819, 40 V, 1A	0404-001005	
D200	DIODE-SCHOTTKY UPS5817, 20 V, 1A	0404-001044	
D701	DIODE-SCHOTTKY HSMS-2805, 70 V	0404-001054	
U205	DIODE-SCHOTTKY RB425D, 20 V, 100 mA	0404-001074	
D402, D602	DIODE-VARACTOR BB149, 30 V, 10 nA	0405-001004	
D401, D601	DIODE-VARACTOR SMV1104-34, 15 V	0405-001005	
D151	DIODE-TVS SM05, 6V/1 mA, 300, SOT-23	0406-001005	
D201	DIODE-ARRAY UMN1, 80 V, 25 mA	0407-001007	
D155	DIODE-ARRAY SMS05, 5 V	0407-001030	
D181, D152	DIODE-ARRAY SMS05, 5 V	0407-001030	
D153, D154	DIODE-ARRAY SMS05, 5 V	0407-001030	
Q164	TR-S MALL SIG NAL KSA812, PNP, 150 mW	0501-000002	
Q401	TR-S MALL SIG NAL NPN, 8 V, 5 V, 6.5 mA	0501-002005	
Q163	TR-S MALL SIG NAL 2SD2114K, NPN	0501-002011	
Q702	TR-S MALL SIG NAL AT32033, NPN	0501-002110	
Q161, Q162	TR-DIGITAL RN1102, NPN, 100 mW	0504-000167	
Q221, Q241	TR-DIGITAL RN1102, NPN, 100 mW	0504-000167	
Q242	FET-SILICON TP0202T, P, -20 V, -0.75A	0505-001007	
U405	TR-ARRAY uPA800T-T1, NPN, 2, 20 V	0506-001002	
U201, U403	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U404, U604	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U605	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U503, U795	TR-ARRAY UMC5N, NPN/PNP, 2, 50 V	0506-001004	

Location No.	Description	SEC Code	Remark
D161, D162	LED CHIP, Y/GRN, 0.8x1.2 mm, 570nm	0601-000273	
D163, D164	LED CHIP, Y/GRN, 0.8x1.2 mm, 570nm	0601-000273	
D165, D166	LED CHIP, Y/GRN, 0.8x1.2 mm, 570nm	0601-000273	
D167, D168	LED CHIP, Y/GRN, 0.8x1.2 mm, 570nm	0601-000273	
D169, D170	LED CHIP, Y/GRN, 0.8x1.2 mm, 570nm	0601-000273	
D171	LED CHIP, Y/GRN, 1.6x2.0 mm, 570nm	0601-000276	
U602, U603, U606	IC-CMOS LOGIC 7SET08, AND GATE	0801-002272	
U504	IC-OP AMP 2274, SOP, 14P, -, DUAL	1201-001007	
U702	IC-PREAMP 2771, SOP, 6P, 150 MIL, SINGLE	1201-001009	
U701	IC- MMIC AMP 2748, SOP, 6P, -, SINGLE	1201-001010	
U705	IC-OP AMP 7131, SOT-23, 5P, -, SINGLE	1201-001018	
U791	IC-RF AMP 240, SOT-388C, 4P, -, TRIPLE	1201-001282	
U401, U402	IC-SWITCH VOL. REG. 5205, SOP, 8P	1203-001207	
U181	IC-DC/DC CONVERTER 1555, SOP, 16P	1203-001289	
U241	IC-DC/DC CONVERTER 1705, SOP, 16P	1203-001386	
U242	IC-DC/DC CONVERTER 1308, SOP, 8P	1203-001557	
U204	IC-VOLTAGE REGULATOR 1015	1203-001592	
U406	IC-SWITCH VOL. REG. 1015, SOT-23A	1203-001593	
U501	IC-IF SYSTEM AD607, SOP, 20P	1204-001006	
U601	IC-TELE. WARM G1, QFP, 48P	1205-001006	
U104	IC-TIMER RS5C372A, SOP, 8P	1206-001009	
RTH161	THERMISTOR-NTC 15 kohm, 5, 3950K	1404-001103	
R183	R-CHIP 100 ohm, 5, 1/16 W	2007-000138	
R202, R527	R-CHIP 100 ohm, 5, 1/16 W	2007-000138	
R707	R-CHIP 220 ohm, 5, 1/16 W	2007-000139	
R169, R512, R515	R-CHIP 1 kohm, 5, 1/16 W	2007-000140	
R611, R724, R719	R-CHIP 1 kohm, 5, 1/16 W	2007-000140	
R403, R607	R-CHIP 2.7 kohm, 5, 1/16 W	2007-000142	
R170, R201	R-CHIP 4.7 kohm, 5, 1/16 W	2007-000143	
R526, R528	R-CHIP 4.7 kohm, 5, 1/16 W	2007-000143	
R723	R-CHIP 8.2 kohm, 5, 1/16 W	2007-000147	
R161, R203, R211	R-CHIP 10 kohm, 5, 1/16 W	2007-000148	
R221, R410	R-CHIP 10 kohm, 5, 1/16 W	2007-000148	
R411, R412	R-CHIP 10 kohm, 5, 1/16 W	2007-000148	
R413, R505, R701	R-CHIP 10 kohm, 5, 1/16 W	2007-000148	
R702	R-CHIP 10 kohm, 5, 1/16 W	2007-000148	
R609, R615	R-CHIP 12 kohm, 5, 1/16 W	2007-000149	

Location No.	Description	SEC Code	Remark
R171	R-CHIP 15 kohm, 5, 1/16 W	2007-000151	
R246, R213	R-CHIP 47 kohm, 5, 1/16 W	2007-000157	
R602	R-CHIP 56 kohm, 5, 1/16 W	2007-000159	
R172	R-CHIP 82 kohm, 5, 1/16 W	2007-000161	
R181, R182	R-CHIP 100 kohm, 5, 1/16 W	2007-000162	
R167, R204	R-CHIP 100 kohm, 5, 1/16 W	2007-000162	
R243, R621	R-CHIP 100 kohm, 5, 1/16 W	2007-000162	
R248, R622	R-CHIP 100 kohm, 5, 1/16 W	2007-000162	
R603	R-CHIP 120 kohm, 5, 1/16 W	2007-000163	
R525	R-CHIP 1Mohm, 5, 1/16 W	2007-000170	
R619	R-CHIP 0 ohm, 5, 1/16 W	2007-000171	
R617	R-CHIP 10 ohm, 5, 1/16 W	2007-000172	
R623, R725	R-CHIP 47 ohm, 5, 1/16 W	2007-000174	
R518, R519	R-CHIP 1.5 kohm, 5, 1/16 W	2007-000242	
R601, R604	R-CHIP 220 kohm, 5, 1/16 W	2007-000566	
R511, R520	R-CHIP 330 kohm, 5, 1/16 W	2007-000758	
R405, R510	R-CHIP 33 kohm, 5, 1/16 W	2007-000775	
R168, R517, R706	R-CHIP 470 ohm, 5, 1/16 W	2007-000932	
R513, R514, R516	R-CHIP 470 ohm, 5, 1/16 W	2007-000932	
R605	R-CHIP 5.6 kohm, 5, 1/16 W	2007-000982	
R612, R416	R-CHIP 680 ohm, 5, 1/16 W	2007-001119	
R712	R-CHIP 18 ohm, 5, 1/16 W	2007-001288	
R708	R-CHIP 39 ohm, 5, 1/16 W	2007-001295	
R705	R-CHIP 51 ohm, 5, 1/16 W	2007-001298	
R710, R166	R-CHIP 68 ohm, 5, 1/16 W	2007-001301	
R175, R176	R-CHIP 68 ohm, 5, 1/16 W	2007-001301	
R162, R163	R-CHIP 120 ohm, 5, 1/16 W	2007-001305	
R507, R508, R509	R-CHIP 330 ohm, 5, 1/16 W	2007-001313	
R408, R703	R-CHIP 820 ohm, 5, 1/16 W	2007-001316	
R606	R-CHIP 1.8 kohm, 5, 1/16 W	2007-001320	
R506, R608	R-CHIP 3.3 kohm, 5, 1/16 W	2007-001325	
R610, R613	R-CHIP 3.3 kohm, 5, 1/16 W	2007-001325	
R614	R-CHIP 3.3 kohm, 5, 1/16 W	2007-001325	
R722	R-CHIP 560 ohm, 5, 1/16 W	2007-002797	
R164, R165	R-CHIP 75 ohm, 5, 1/16 W	2007-007009	
R245	R-CHIP 100 kohm, 1, 1/16 W	2007-007107	
R174, R718	R-CHIP 15 kohm, 1, 1/16 W	2007-007132	

Location No.	Description	SEC Code	Remark
R721	R-CHIP 1.2 kohm, 1, 1/16 W	2007-007137	
R249	R-CHIP 10 kohm, 1, 1/16 W	2007-007142	
R715	R-CHIP 12 kohm, 1, 1/16 W	2007-007309	
R717	R-CHIP 8.2 kohm, 1, 1/16 W	2007-007310	
R704	R-CHIP 22 kohm, 1, 1/16 W	2007-007311	
R716, R404	R-CHIP 3.3 kohm, 1, 1/16 W	2007-007316	
R409	R-CHIP 1 kohm, 1, 1/16 W	2007-007318	
R402	R-CHIP 390 ohm, 1, 1/16 W	2007-007319	
R242	R-CHIP 200 kohm, 1, 1/16 W	2007-007334	
R713, R714	R-CHIP 240 ohm, 1, 1/16 W	2007-007517	
R241	R-CHIP 56 kohm, 1, 1/16 W	2007-007538	
R244, R250	R-CHIP 330 kohm, 1, 1/16 W	2007-007573	
R406, R401	R-CHIP 470 ohm, 1, 1/16 W	2007-007586	
R720	R-CHIP1.8 kohm, 1, 1/16 W	2007-007588	
C221, C224, C405	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C225, C226	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C227, C228	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C229, C230	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C516, C623	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C534, C713, C724	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C703, C704, C728	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C709, C712	C-CERAMIC, CHIP 100 pF, 5, 50 V	2203-000233	
C402, C411, C413	C-CERAMIC, CHIP 10 nF, 10, 16 V	2203-000254	
C418, C424, C720	C-CERAMIC, CHIP 10 nF, 10, 16 V	2203-000254	
C506	C-CERAMIC, CHIP 10 nF, 10, 16 V	2203-000254	
C619, C428	C-CERAMIC, CHIP 10 pF, 0.5 pF, 50 V	2203-000278	
C701, C705, C637	C-CERAMIC, CHIP 12 pF, 5, 50 V	2203-000330	
C410, C615	C-CERAMIC, CHIP 150 pF, 5, 50 V	2203-000359	
C632, C633	C-CERAMIC, CHIP 150 pF, 5, 50 V	2203-000359	
C702	C-CERAMIC, CHIP 15 pF, 5, 50 V	2203-000386	
C727	C-CERAMIC, CHIP 18 pF, 5, 50 V	2203-000425	
C150, C510	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	
C511, C604	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	
C151, C152	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	
C251, C252	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	
C512, C606, C620	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	
C621, C721, C508	C-CERAMIC, CHIP 1 nF, 10, 50 V	2203-000438	

Location No.	Description	SEC Code	Remark
C613	C-CERAMIC, CHIP 1 pF, 0.25 pF, 50 V	2203-000466	
C523, C528, C616	C-CERAMIC, CHIP 2.2 nF, 10, 50 V	2203-000489	
C717, C611	C-CERAMIC, CHIP 220 pF, 10, 50 V	2203-000585	
C520, C525	C-CERAMIC, CHIP 3.3 nF, 10, 50 V	2203-000714	
C521, C526	C-CERAMIC, CHIP 3.9 nF, 10, 50 V	2203-000725	
C617	C-CERAMIC, CHIP 33 pF, 5, 50 V	2203-000812	
C403	C-CERAMIC, CHIP 470 pF, 10, 50 V	2203-000940	
C419, C423	C-CERAMIC, CHIP 470 pF, 10, 50 V	2203-000940	
C505, C718, C212	C-CERAMIC, CHIP 470 pF, 10, 50 V	2203-000940	
C535, C417	C-CERAMIC, CHIP 47 pF, 5, 50 V	2203-000995	
C522, C527	C-CERAMIC, CHIP 5.6 nF, 10, 25 V	2203-001033	
C610	C-CERAMIC, CHIP 6.8 nF, 10, 25 V	2203-001101	
C707	C-CERAMIC, CHIP 680 pF, 10, 50 V	2203-001124	
C618, C601, C607	C-CERAMIC, CHIP 68 pF, 5, 50 V	2203-001153	
C626	C-CERAMIC, CHIP 6 pF, 0.5 pF, 50 V	2203-001178	
C427	C-CERAMIC, CHIP 8.2 nF, 10, 16 V	2203-001210	
C714, C609, C536	C-CERAMIC, CHIP 820 pF, 10, 50 V	2203-001221	
C501	C-CERAMIC, CHIP 82 pF, 5, 50 V	2203-001239	
C723, C530	C-CERAMIC, CHIP 0.5 pF, 0.25 pF, 50 V	2203-001383	
C614	C-CERAMIC, CHIP 1.5 pF, 0.25 pF, 50 V	2203-001385	
C246, C631	C-CERAMIC, CHIP 22 nF, 20, 25 V1.0 mm	2203-001405	
C710	C-CERAMIC, CHIP 30 pF, 5, 50 V, X7R	2203-001412	
C209	C-CERAMIC, CHIP 33 nF, 10, 16 V1.0 mm	2203-001416	
C161, C163, C164	C-CERAMIC, CHIP 2.2 uF, +80-20, 16 V	2203-001598	
C242, C243	C-CERAMIC, CHIP 330 nF, +80-20, 16 V	2203-001630	
C519, C524	C-CERAMIC, CHIP 330 pF, 10, 50 V	2203-002443	
C719	C-CERAMIC, CHIP 1.2 nF, 10, 50 V	2203-002687	
C630	C-CERAMIC, CHIP 1.8 pF, 0.25 pF, 50 V	2203-005050	
C409, C414	C-CERAMIC, CHIP 3.3 pF, 0.25 pF, 50 V	2203-005052	
C629, C624	C-CERAMIC, CHIP 3.3 pF, 0.25 pF, 50 V	2203-005052	
C627, C628	C-CERAMIC, CHIP 3.9 pF, 0.25 pF, 50 V	2203-005053	
C415	C-CERAMIC, CHIP 6.8 pF, 0.25 pF, 50 V	2203-005056	
C181, C185	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C186, C214	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C244, C249	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C406, C416	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C503, C507, C513	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	

Location No.	Description	SEC Code	Remark
C514, C517	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C518, C529	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C532, C157, C156	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C603, C153	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C154, C155	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C605, C408	C-CERAMIC, CHIP 100 nF, +80-20, 16 V	2203-005061	
C250, C401, C634	C-CERAMIC, CHIP 1 uF, +80-20, 10 V, Y5 V	2203-005065	
C407, C504, C515	C-CERAMIC, CHIP 1 uF, +80-20, 10 V, Y5 V	2203-005065	
C165, C166	C-CERAMIC, CHIP 100 nF, 10, 16 V, X7R	2203-005148	
C167, C168	C-CERAMIC, CHIP 100 nF, 10, 16 V, X7R	2203-005148	
C169	C-CERAMIC, CHIP 100 nF, 10, 16 V, X7R	2203-005148	
C708, C509	C-CERAMIC, CHIP 2.2 pF, 0.25 pF, 50 V	2203-005158	
C612	C-CERAMIC, CHIP 4.7 pF, 0.1 pF, 50 V	2203-005395	
C711	C-CERAMIC, CHIP 180 pF, 5, 25 V	2203-005503	
C404, C420, C726	C-TA, CHIP 10 uF, 20, 10 V	2404-001020	
C241	C-TA, CHIP 33 uF, 20, 6.3 V	2404-001032	
C182, C213, C426	C-TA, CHIP 10 uF, 20, 6.3 V	2404-001064	
C245, C248	C-TA, CHIP 220 uF, 20, 6.3 V	2404-001083	
C775, C183	C-TA, CHIP 33 uF, 20, 6.3 V	2404-001100	
C247	C-TA, CHIP 100 UF, 20, 16 V	2404-001107	
L241	INDUCTOR-SMD 10 uH	2703-000001	
L504, L506	INDUCTOR-SMD 1 mH	2703-000153	
L242	INDUCTOR-SMD 22 uH	2703-000172	
L606	INDUCTOR-SMD 18 nH	2703-001028	
L605	INDUCTOR-SMD 180 nH	2703-001043	
L604	INDUCTOR-SMD 2.7 uH	2703-001047	
L602	INDUCTOR-SMD 8.2 nH	2703-001063	
L609	INDUCTOR-SMD 8.8 nH	2703-001078	
L501, L507	INDUCTOR-SMD 220 nH	2703-001079	
L707	INDUCTOR-SMD 1.2 nH	2703-001204	
L705	INDUCTOR-SMD 3.3 nH	2703-001258	
L503, L505	INDUCTOR-SMD 680 uH	2703-001417	
L709	INDUCTOR-SMD 100 nH	2703-001513	
L704	INDUCTOR-SMD 33 nH	2703-001543	
L706	INDUCTOR-SMD 47 nH	2703-001545	
L607, L608, L610	INDUCTOR-SMD 120 nH	2703-001546	
L710, L708	INDUCTOR-SMD 10 nH	2703-001547	

Location No.	Description	SEC Code	Remark
L502	INDUCTOR-SMD 82 nH	2703-001685	
L711	INDUCTOR-SMD 5.6 nH, 0.3 nH	2703-001748	
X101	CRYSTAL-UNIT 32.768KHz, 20 ppm	2801-003602	
X401	CRYSTAL-SMD 13 MHz, 10 ppm	2801-003603	
F501	FILTER-CERAMIC IF, 13.0 MHz	2903-001002	
F701, F702	FILTER-SAW 890-915 MHz	2904-001003	
F703	FILTER-SAW 947.5 MHz, 25 MHz	2904-001042	
U502	FILTER-SAW 83 MHz, 160KHz, -, TP, 10 dB, -	2904-001078	
U707	FILTER-DUPLEXER 947 MHz, 902 MHz	2909-001059	
J181	CONNECTOR-CARD EDGE 6P, 2.54 mm	3709-001086	
J151	CONNECTOR-SOCKET 18P, 1R, 0.5 mm	3710-001309	
J221	CONNECTOR-SOCKET 80P, 2R, 0.5 mm	3710-001312	
U706	COUPLER-DIRECTION 902.5+-12.5 MHz	4709-001008	
U607	RF-MOLULE 900+-100 MHz, 50 ohm	4709-001063	
PCB	PCB- MAIN , EPOXY, 6L, T0.8, 118.25*13	GH41-10632A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-00001A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20057A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20059A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20060A	
-	NPR-SHIELD STRIP(A) SCH-1100	GH71-10639A	
-	NPR-SHIELD STRIP(B) SCH-1100	GH71-10640A	
-	NPR-SHIELD STRIP(C) SCH-1100	GH71-10641A	
-	NPR-SHIELD STRIP(D) SCH-1100	GH71-10643A	
-	NPR-SHIELD STRIP SCH-1900, C5210S-3/4H	GH71-10644A	
-	MIC-CONDENSOR 2 V, 130 uA, 48 dB	3003-001026	
-	RMO-MIC ADAPTOR SPH-5000, RUBBER	GH73-40657A	

2-2 Main Parts List (China)

Location No.	Description	SEC Code	Remark
D202	DIODE-ZENER UDZ3.0B, 3.0 V, 3.01-3.22 V	0403-001166	
D241, D242	DIODE-SCHOTTKY PRLL5819, 40 V, 1A	0404-001005	
D200	DIODE-SCHOTTKY UPS5817, 20 V, 1A	0404-001044	
D701	DIODE-SCHOTTKY HSMS-2805, 70 V	0404-001054	
U205	DIODE-SCHOTTKY RB425D, 20 V, 100 mA	0404-001074	
D402, D602	DIODE-VARACTOR BB149, 30 V, 10 nA	0405-001004	
D401, D601	DIODE-VARACTOR SMV1104-34, 15 V, 50 nA,	0405-001005	
D151	DIODE-TVS SM05, 6V/1 mA, 300, SOT-23	0406-001005	
D201	DIODE-ARRAY UMN1, 80 V, 25 mA	0407-001007	
D155	DIODE-ARRAY SMS05, 5 V, -, CK5-2	0407-001030	
D181, D152	DIODE-ARRAY SMS05, 5 V, -, CK5-2	0407-001030	
D153, D154	DIODE-ARRAY SMS05, 5 V, -, CK5-2	0407-001030	
Q401	TR-S MALL SIGNAL NPN, 8 V, 5 V, 6.5 mA	0501-002005	
Q163	TR-S MALL SIGNAL 2SD2114K, NPN	0501-002011	
Q702	TR-S MALL SIGNAL AT32033, NPN	0501-002110	
Q161, Q162	TR-DIGITAL RN1102, NPN, 100 mW	0504-000167	
Q221, Q241	TR-DIGITAL RN1102, NPN, 100 mW	0504-000167	
Q242	FET-SILICON TP0202T, P, -20 V	0505-001007	
U405	TR-ARRAY uPA800T-T1, NPN	0506-001002	
U201, U403	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U404, U604	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U605	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U503, U795	TR-ARRAY UMC5N, NPN/PNP, 2, 50 V	0506-001004	
D161, D162	LED CHIP, Y/GRN, 0.8 x 1.2 mm, 570 nm	0601-000273	
D163, D164	LED CHIP, Y/GRN, 0.8 x 1.2 mm, 570 nm	0601-000273	
D165, D166	LED CHIP, Y/GRN, 0.8 x 1.2 mm, 570 nm	0601-000273	
D167, D168	LED CHIP, Y/GRN, 0.8 x 1.2 mm, 570 nm	0601-000273	
D169, D170	LED CHIP, Y/GRN, 0.8 x 1.2 mm, 570 nm	0601-000273	
D171	LED CHIP, Y/GRN, 1.6 x 2.0 mm, 570 nm	0601-000276	
U602, U603, U606	IC-CMOS LOGIC 7SET08, AND GATE	0801-002272	
U504	IC-OP AMP 2274, SOP, 14P, -, DUAL	1201-001007	
U702	IC-PREAMP 2771, SOP, 6P, 150 MIL	1201-001009	
U701	IC- MMIC AMP 2748, SOP, 6P, -, SINGLE	1201-001010	
U705	IC-OP AMP 7131, SOT-23, 5P, -, SINGLE	1201-001018	
U791	IC-RF AMP 240, SOT-388C, 4P, -, TRIPLE	1201-001282	
U401, U402	IC-SWITCH VOL. REG. 5205, SOP, 8P	1203-001207	

Location No.	Description	SEC Code	Remark
U181	IC-DC/DC CONVERTER 1555, SOP, 16P	1203-001289	
U241	IC-DC/DC CONVERTER 1705, SOP, 16P	1203-001386	
U242	IC-DC/DC CONVERTER 1308, SOP, 8P	1203-001557	
U204	IC-VOLTAGE REGULATOR 1015	1203-001592	
U406	IC-SWITCH VOL. REG. 1015, SOT-23A	1203-001593	
U501	IC-IF SYSTEM AD607, SOP, 20P	1204-001006	
U601	IC-TELE. WARM G1, QFP, 48P	1205-001006	
U104	IC-TIMER RS5C372A, SOP, 8P	1206-001009	
R172	R-CHIP 150 kohm, 5 %, 1/16 W	2007-000104	
R171	R-CHIP 1 Mohm, 5 %, 1/16 W	2007-000109	
R183	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R202, R527	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R707	R-CHIP 220 ohm, 5 %, 1/16 W	2007-000139	
R169, R512, R515	R-CHIP 1 kohm, 5 %, 1/16 W	2007-000140	
R611, R724, R719	R-CHIP 1 kohm, 5 %, 1/16 W	2007-000140	
R403, R607	R-CHIP 2.7 kohm, 5 %, 1/16 W	2007-000142	
R170, R201	R-CHIP 4.7 kohm, 5 %, 1/16 W	2007-000143	
R526, R528	R-CHIP 4.7 kohm, 5 %, 1/16 W	2007-000143	
R723	R-CHIP 8.2 kohm, 5 %, 1/16 W	2007-000147	
R161, R203	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R211, R212	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R221, R410	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R411, R412	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R413, R505, R701	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R702	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R609, R615	R-CHIP 12 kohm, 5 %, 1/16 W	2007-000149	
R246, R213	R-CHIP 47 kohm, 5 %, 1/16 W	2007-000157	
R602	R-CHIP 56 kohm, 5 %, 1/16 W	2007-000159	
R181, R182	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R167, R204	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R243, R621	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R248, R622	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R603	R-CHIP 120 kohm, 5 %, 1/16 W	2007-000163	
R525	R-CHIP 1 Mohm, 5 %, 1/16 W	2007-000170	
R619	R-CHIP 0 ohm, 5 %, 1/16 W	2007-000171	
R617	R-CHIP 10 ohm, 5 %, 1/16 W	2007-000172	

Location No.	Description	SEC Code	Remark
R623, R725	R-CHIP 47 ohm, 5 %, 1/16 W	2007-000174	
R518, R519	R-CHIP 1.5 kohm, 5 %, 1/16 W	2007-000242	
R173	R-CHIP 110 kohm, 5 %, 1/16 W	2007-000317	
R601, R604	R-CHIP 220 kohm, 5 %, 1/16 W	2007-000566	
R511, R520	R-CHIP 330 kohm, 5 %, 1/16 W	2007-000758	
R405, R510	R-CHIP 33 kohm, 5 %, 1/16 W	2007-000775	
R168, R517, R706	R-CHIP 470 ohm, 5 %, 1/16 W	2007-000932	
R513, R514, R516	R-CHIP 470 ohm, 5 %, 1/16 W	2007-000932	
R605	R-CHIP 5.6 kohm, 5 %, 1/16 W	2007-000982	
R612, R416	R-CHIP 680 ohm, 5 %, 1/16 W	2007-001119	
R712	R-CHIP 18 ohm, 5 %, 1/16 W	2007-001288	
R708	R-CHIP 39 ohm, 5 %, 1/16 W	2007-001295	
R705	R-CHIP 51 ohm, 5 %, 1/16 W	2007-001298	
R710, R166	R-CHIP 68 ohm, 5 %, 1/16 W	2007-001301	
R175, R176	R-CHIP 68 ohm, 5 %, 1/16 W	2007-001301	
R162, R163	R-CHIP 120 ohm, 5 %, 1/16 W	2007-001305	
R507, R508, R509	R-CHIP 330 ohm, 5 %, 1/16 W	2007-001313	
R408, R703	R-CHIP 820 ohm, 5 %, 1/16 W	2007-001316	
R606	R-CHIP 1.8 kohm, 5 %, 1/16 W	2007-001320	
R506, R608	R-CHIP 3.3 kohm, 5 %, 1/16 W	2007-001325	
R610, R613	R-CHIP 3.3 kohm, 5 %, 1/16 W	2007-001325	
R614	R-CHIP 3.3 kohm, 5 %, 1/16 W	2007-001325	
R722	R-CHIP 560 ohm, 5 %, 1/16 W	2007-002797	
R164, R165	R-CHIP 75 ohm, 5 %, 1/16 W	2007-007009	
R245	R-CHIP 100 kohm, 1 %, 1/16 W	2007-007107	
R718	R-CHIP 15 kohm, 1 %, 1/16 W	2007-007132	
R721	R-CHIP 1.2 kohm, 1 %, 1/16 W	2007-007137	
R249	R-CHIP 10 kohm, 1 %, 1/16 W	2007-007142	
R715	R-CHIP 12 kohm, 1 %, 1/16 W	2007-007309	
R717	R-CHIP 8.2 kohm, 1 %, 1/16 W	2007-007310	
R704	R-CHIP 22 kohm, 1 %, 1/16 W	2007-007311	
R716, R404	R-CHIP 3.3 kohm, 1 %, 1/16 W	2007-007316	
R409	R-CHIP 1 kohm, 1 %, 1/16 W	2007-007318	
R402	R-CHIP 390 ohm, 1 %, 1/16 W	2007-007319	
R242	R-CHIP 200 kohm, 1 %, 1/16 W	2007-007334	
R713, R714	R-CHIP 240 ohm, 1 %, 1/16 W	2007-007517	
R241	R-CHIP 56 kohm, 1 %, 1/16 W	2007-007538	

Location No.	Description	SEC Code	Remark
R244, R250	R-CHIP 330 kohm, 1 %, 1/16 W	2007-007573	
R406, R401	R-CHIP 470 ohm, 1 %, 1/16 W	2007-007586	
R720	R-CHIP 1.8 kohm, 1 %, 1/16 W	2007-007588	
C221, C224, C405	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C225, C226	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C227, C228	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C229, C230	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C516, C623	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C534, C713, C724	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C703, C704, C728	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C709, C712	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C402, C411, C413	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C418, C424, C720	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C506	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C619, C428	C-CERAMIC, CHIP 10 pF, 0.5 pF, 50 V	2203-000278	
C701, C705, C637	C-CERAMIC, CHIP 12 pF, 5 %, 50 V	2203-000330	
C410, C615	C-CERAMIC, CHIP 150 pF, 5 %, 50 V	2203-000359	
C632, C633	C-CERAMIC, CHIP 150 pF, 5 %, 50 V	2203-000359	
C702	C-CERAMIC, CHIP 15 pF, 5 %, 50 V	2203-000386	
C727	C-CERAMIC, CHIP 18 pF, 5 %, 50 V	2203-000425	
C150, C510	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C511, C604	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C151, C152	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C251, C252	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C512, C606, C620	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C621, C721, C508	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C613	C-CERAMIC, CHIP 1 pF, 0.25 pF, 50 V	2203-000466	
C523, C528, C616	C-CERAMIC, CHIP 2.2 nF, 10 %, 50 V	2203-000489	
C717, C611	C-CERAMIC, CHIP 220 pF, 10 %, 50 V	2203-000585	
C520, C525	C-CERAMIC, CHIP 3.3 nF, 10 %, 50 V	2203-000714	
C521, C526	C-CERAMIC, CHIP 3.9 nF, 10 %, 50 V	2203-000725	
C617	C-CERAMIC, CHIP 33 pF, 5 %, 50 V	2203-000812	
C403	C-CERAMIC, CHIP 470 pF, 10 %, 50 V	2203-000940	
C419, C423	C-CERAMIC, CHIP 470 pF, 10 %, 50 V	2203-000940	
C505, C718, C212	C-CERAMIC, CHIP 470 pF, 10 %, 50 V	2203-000940	
C535, C417	C-CERAMIC, CHIP 47 pF, 5 %, 50 V	2203-000995	
C522, C527	C-CERAMIC, CHIP 5.6 nF, 10 %, 25 V	2203-001033	

Location No.	Description	SEC Code	Remark
C610	C-CERAMIC, CHIP 6.8 nF, 10 %, 25 V	2203-001101	
C707	C-CERAMIC, CHIP 680 pF, 10 %, 50 V	2203-001124	
C618, C601, C607	C-CERAMIC, CHIP 68 pF, 5 %, 50 V	2203-001153	
C626	C-CERAMIC, CHIP 6 pF, 0.5 pF, 50 V	2203-001178	
C427	C-CERAMIC, CHIP 8.2 nF, 10 %, 16 V	2203-001210	
C714, C609, C536	C-CERAMIC, CHIP 820 pF, 10 %, 50 V	2203-001221	
C501	C-CERAMIC, CHIP 82 pF, 5 %, 50 V	2203-001239	
C723, C530	C-CERAMIC, CHIP 0.5 pF, 0.25 pF, 50 V	2203-001383	
C614	C-CERAMIC, CHIP 1.5 pF, 0.25 pF, 50 V	2203-001385	
C246, C631	C-CERAMIC, CHIP 22 nF, 20 %, 25 V	2203-001405	
C710	C-CERAMIC, CHIP 30 pF, 5 %, 50 V	2203-001412	
C209	C-CERAMIC, CHIP 33 nF, 10 %, 16 V	2203-001416	
C166, C167	C-CERAMIC, CHIP 2.2 uF, +80-20 %	2203-001598	
C168, C169	C-CERAMIC, CHIP 2.2 uF, +80-20 %	2203-001598	
C242, C243	C-CERAMIC, CHIP 330 nF, +80-20 %	2203-001630	
C519, C524	C-CERAMIC, CHIP 330 pF, 10 %, 50 V	2203-002443	
C719	C-CERAMIC, CHIP 1.2 nF, 10 %, 50 V	2203-002687	
C630	C-CERAMIC, CHIP 1.8 pF, 0.25 pF, 50 V	2203-005050	
C409, C414	C-CERAMIC, CHIP 3.3 pF, 0.25 pF, 50 V	2203-005052	
C629, C624	C-CERAMIC, CHIP 3.3 pF, 0.25 pF, 50 V	2203-005052	
C627, C628	C-CERAMIC, CHIP 3.9 pF, 0.25 pF, 50 V	2203-005053	
C415	C-CERAMIC, CHIP 6.8 pF, 0.25 pF, 50 V	2203-005056	
C181, C185	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C186, C214	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C244, C249	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C406, C416	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C503, C507, C513	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C514, C517	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C518, C529	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C532, C157, C156	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C603, C153	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C154, C155	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C605, C408	C-CERAMIC, CHIP 100 nF, +80-20 %	2203-005061	
C250, C401, C634	C-CERAMIC, CHIP 1 uF, +80-20 %	2203-005065	
C407, C504, C515	C-CERAMIC, CHIP 1 uF, +80-20 %	2203-005065	
C170, C171	C-CERAMIC, CHIP 100 nF, 10 %	2203-005148	
C172, C173	C-CERAMIC, CHIP 100 nF, 10 %	2203-005148	

Location No.	Description	SEC Code	Remark
C174	C-CERAMIC, CHIP 100 nF, 10 %	2203-005148	
C509, C708	C-CERAMIC, CHIP 2.2 pF, 0.25 pF, 50 V	2203-005158	
C612	C-CERAMIC, CHIP 4.7 pF, 0.1 pF, 50 V	2203-005395	
C711	C-CERAMIC, CHIP 180 pF, 5 %, 25 V	2203-005503	
C404, C420, C726	C-TA, CHIP 10 uF, 20 %, 10 V	2404-001020	
C241	C-TA, CHIP 33 uF, 20 %, 6.3 V	2404-001032	
C182, C213, C426	C-TA, CHIP 10 uF, 20 %, 6.3 V, GP, TP, 2012, -	2404-001064	
C245, C248	C-TA, CHIP 220 uF, 20 %, 6.3 V, LZ, TP, 7125, -	2404-001083	
C775, C183	C-TA, CHIP 33 uF, 20 %, 6.3 V, GP, TP, 3719, -	2404-001100	
C247	C-TA, CHIP 100 uF, 20 %, 16 V, LZ, TP, 7132	2404-001107	
L241	INDUCTOR-SMD 10 uH, 10 %	2703-000001	
L504, L506	INDUCTOR-SMD 1 mH, 20 %	2703-000153	
L242	INDUCTOR-SMD 22 uH, 10 %	2703-000172	
L606	INDUCTOR-SMD 18 nH, 5 %	2703-001028	
L605	INDUCTOR-SMD 180 nH, 5 %	2703-001043	
L604	INDUCTOR-SMD 2.7 uH, 10 %	2703-001047	
L602	INDUCTOR-SMD 8.2 nH, 0.5 nH	2703-001063	
L609	INDUCTOR-SMD 8.8 nH, 2 %	2703-001078	
L501, L507	INDUCTOR-SMD 220 nH, 5 %	2703-001079	
L707	INDUCTOR-SMD 1.2 nH, 0.3 nH	2703-001204	
L705	INDUCTOR-SMD 3.3 nH, 0.3 nH	2703-001258	
L503, L505	INDUCTOR-SMD 680 uH, 20 %	2703-001417	
L709	INDUCTOR-SMD 100 nH, 5 %	2703-001513	
L704	INDUCTOR-SMD 33 nH, 5 %	2703-001543	
L706	INDUCTOR-SMD 47 nH, 5 %	2703-001545	
L607, L608, L610	INDUCTOR-SMD 120 nH, 5 %	2703-001546	
L710, L708	INDUCTOR-SMD 10 nH, 5 %	2703-001547	
L502	INDUCTOR-SMD 82 nH, 5 %	2703-001685	
L711	INDUCTOR-SMD 5.6 nH, 0.3 nH	2703-001748	
X101	CRYSTAL-UNIT 32.768 kHz, 20 ppm	2801-003602	
X401	CRYSTAL-SMD 13 MHz, 10 ppm, 28-ACF	2801-003603	
F501	FILTER-CERAMIC IF, 13.0 MHz	2903-001002	
F701, F702	FILTER-SAW 890-915 MHz	2904-001003	
F703	FILTER-SAW 947.5 MHz, 25 MHz	2904-001042	
U502	FILTER-SAW 83 MHz, 160KHz, -, TP, 10dB, -	2904-001078	
U707	FILTER-DUPLEXER 947 MHz, 902 MHz	2909-001059	
RDS161	SWITCH-REED 200 V, 0.5A, -, -	3409-001002	

Location No.	Description	SEC Code	Remark
J181	CONNECTOR-CARD EDGE 6P, 2.54 mm		
J151	CONNECTOR-SOCKET 18P, 1R, 0.5 mm	3710-001309	
J221	CONNECTOR-SOCKET 80P, 2R, 0.5 mm	3710-001312	
BAT201	BATTERY-POLYMER 3.3 V, 0.065 mAH	4302-001026	
U706	COUPLER-DIRECTION 902.5+-12.5 MHz	4709-001008	
U607	RF-MOLULE 900+-100 MHz, 50 ohm	4709-001063	
J161	DISPLAY LCD- CHINA SGH-500	GH07-00003A	
SEMI-CABLE	CBF SIGNAL- SGH-500, COAXIAL	GH39-20017A	
PCB- MAIN	PCB- MAIN C C, EPOXY	GH41-00008A	
METALDOM	UNIT-KEY ARRAY, YOU07d	GH59-10168A	
SHIELD SPONGE	GASKET-SGH-500, POLYURETHANE	GH63-20056A	
SHIELD SPONGE	GASKET-SGH-500, POLYURETHANE	GH63-20058A	
BACKUP-TAPE	MCT-BACKUP TAPE SGH-600, TAPE	GH74-40518A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-00001A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20057A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20059A	
SHIELD SPONGE	GASKET- SGH-500, POLYURETHANE	GH63-20060A	
-	MIC-CONDENSOR 2 V, 130 uA, 48 dB	3003-001026	
-	RMO-MIC ADAPTOR SPH-5000, RUBBER	GH73-40657A	

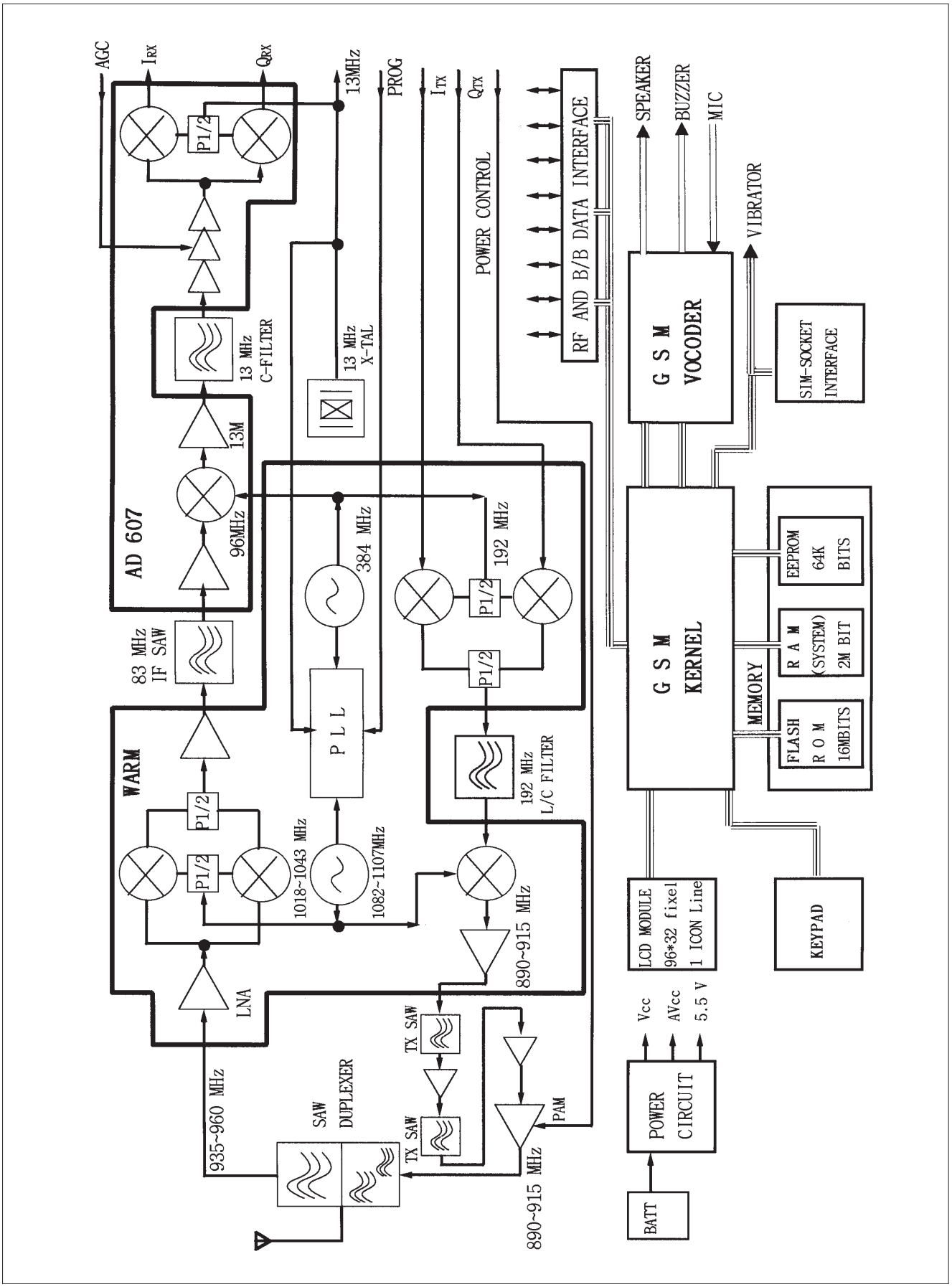
2-3 Memory Parts List

Location No.	Description	SEC Code	Remark
-	PRA AUTO SMD- SGH-500, SEUK	GH94-00854A	
D302	DIODE-TVS SM05, 6V/1 mA, 300, SOT-23	0406-001005	
D101	DIODE-ARRY DAN202U, 80 V, 100 mA	0407-000115	
Q101	TR-SMALL SIGNAL 2SC4081, NPN, 200 mW	0501-000218	
Q102	TR-SMALL SIGNAL MMBT2222A, NPN	0501-000457	
U303	TR-ARRAY UMD3N, NPN/PNP, 2, 300 mW	0506-001003	
U195	IC-CMOS LOGIC TC7W32FU, OR GATE	0801-002339	
U194	IC-CMOS LOGIC 7S04FU, INVERTER	0801-002345	
U103	IC-EEPROM 24645, 8192x8BIT, SOP	1103-001084	
U192	IC-SRAM 68V2000, 256Kx8BIT	1106-001130	
U191, U193	IC-FLASH MEMORY 29LV800, 1Mx8BIT	1107-001062	
U302	IC-AUDIO AMP 34119, SOP, 8P, 150 MIL	1201-000105	
U102	IC-RESET 809, SOP, 3P, -, PLASTIC	1203-000392	
U202, U203	IC-VOLTAGE REGULATOR 1015, SOT-23A-5	1203-001592	
U101	IC-COMM. CONTROLLER VP40524A2	1205-001327	
U301	IC-CODEC VP40506B4, QFP, 80P	1205-001328	
R144	THERMISTOR-NTC 15 kohm, 5 %	1404-001103	
R113, R114	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R115, R116	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R117, R125	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R126, R306	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R307	R-CHIP 100 ohm, 5 %, 1/16 W	2007-000138	
R304, R305, R315	R-CHIP 1 kohm, 5 %, 1/16 W	2007-000140	
R101, R102	R-CHIP 2.2 kohm, 5 %, 1/16 W	2007-000141	
R103, R104	R-CHIP 2.2 kohm, 5 %, 1/16 W	2007-000141	
R141, R320	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R193	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R301, R308	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R309, R310	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R316	R-CHIP 10 kohm, 5 %, 1/16 W	2007-000148	
R140, R122	R-CHIP 15 kohm, 5 %, 1/16 W	2007-000151	
C132, R143	R-CHIP 15 kohm, 5 %, 1/16 W	2007-000151	
R133	R-CHIP 22 kohm, 5 %, 1/16 W	2007-000153	
R105, R120	R-CHIP 47 kohm, 5 %, 1/16 W	2007-000157	
R121	R-CHIP 47 kohm, 5 %, 1/16 W	2007-000157	
R106, R111	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	

Location No.	Description	SEC Code	Remark
R112, R119	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R130, R131	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R132, R134	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R191, R192, R321	R-CHIP 100 kohm, 5 %, 1/16 W	2007-000162	
R322, R324, R142	R-CHIP 0 ohm, 5 %, 1/16 W	2007-000171	
R311, R314	R-CHIP 10 ohm, 5 %, 1/16 W	2007-000172	
R318, R319	R-CHIP 10 ohm, 5 %, 1/16 W	2007-000172	
R312, R313	R-CHIP 22 ohm, 5 %, 1/16 W	2007-000173	
R208, R210	R-CHIP 1.2 kohm, 1 %, 1/16 W, DA, TP, 1608	2007-000219	
R109	R-CHIP 33 kohm, 1 %, 1/16 W, DA, TP, 1608	2007-000772	
R110	R-CHIP 39 kohm, 1 %, 1/16 W, DA, TP, 1608	2007-000828	
R123, R124	R-CHIP 5.6 kohm, 5 %, 1/16 W	2007-000982	
R205, R207	R-CHIP 330 ohm, 5 %, 1/16 W	2007-001313	
R302, R303	R-CHIP 330 ohm, 5 %, 1/16 W	2007-001313	
R107	R-CHIP 9.1 kohm, 5 %, 1/16 W	2007-007013	
R317	R-CHIP 51 kohm, 5 %, 1/16 W	2007-007014	
R209, R129	R-CHIP 10 kohm, 1 %, 1/16 W	2007-007142	
C109, C115	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C116, C117	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C118, C119	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C120, C121	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C122, C123	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C124, C126	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C127, C128	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C129, C313	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C314	C-CERAMIC, CHIP 100 pF, 5 %, 50 V	2203-000233	
C315, C316	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C326, C194	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C130, C131	C-CERAMIC, CHIP 10 nF, 10 %, 16 V	2203-000254	
C309, C310, C312	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C327	C-CERAMIC, CHIP 1 nF, 10 %, 50 V	2203-000438	
C207, C210, C323	C-CERAMIC, CHIP 470 pF, 10 %, 50 V	2203-000940	
C322, C324, C325	C-CERAMIC, CHIP 220 nF, +80-20 %, 16 V	2203-001402	
C317, C318	C-CERAMIC, CHIP 47 nF, 10 %, 16 V	2203-001432	
C319, C321	C-CERAMIC, CHIP 47 nF, 10 %, 16 V	2203-001432	
C101, C205	C-CERAMIC, CHIP 2.2 uF, +80-20 %, 16 V	2203-001598	
C307, C311	C-CERAMIC, CHIP 150 nF, +80-20 %, 16 V	2203-005015	

Location No.	Description	SEC Code	Remark
C102, C103	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C104, C105	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C108, C112	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C113, C191	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C192, C193	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C201, C202	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C203, C204	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C206, C301	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C302, C303	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C304, C305	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C306	C-CERAMIC, CHIP 100 nF, +80-20 %, 16 V	2203-005061	
C114	C-CERAMIC, CHIP 1uF, +80-20 %, 10 V	2203-005065	
C308	C-TA, CHIP 33uF, 20 %, 6.3 V, GP, TP, 3528, -	2404-001032	
C208, C211	C-TA, CHIP 10uF, 20 %, 6.3 V, GP, TP, 2012, -	2404-001064	
J303	BUZZER-MAGNETIC 87DB, 3.6 V, 95 mA	3002-001070	
J102, J302	CONNECTOR-SOCKET 2P, 1R, 1.27 mm	3710-001105	
J101	CONNECTOR-HEADER NOWALL, 80P	3711-003826	
PCB	PCB-B/B B/B, EPOXY, 6L, T0.8, 138*11	GH41-10633A	

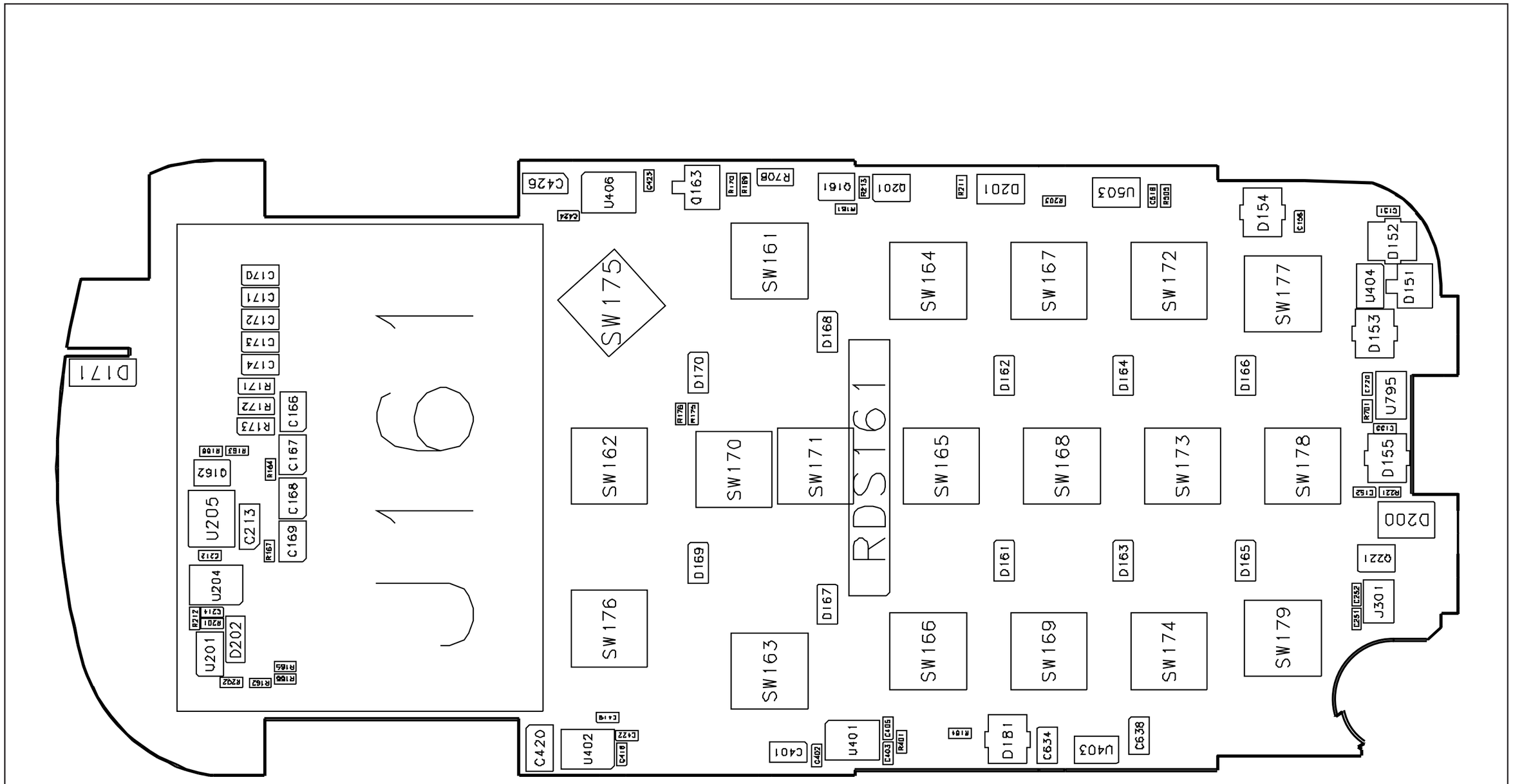
3. Block Diagrams



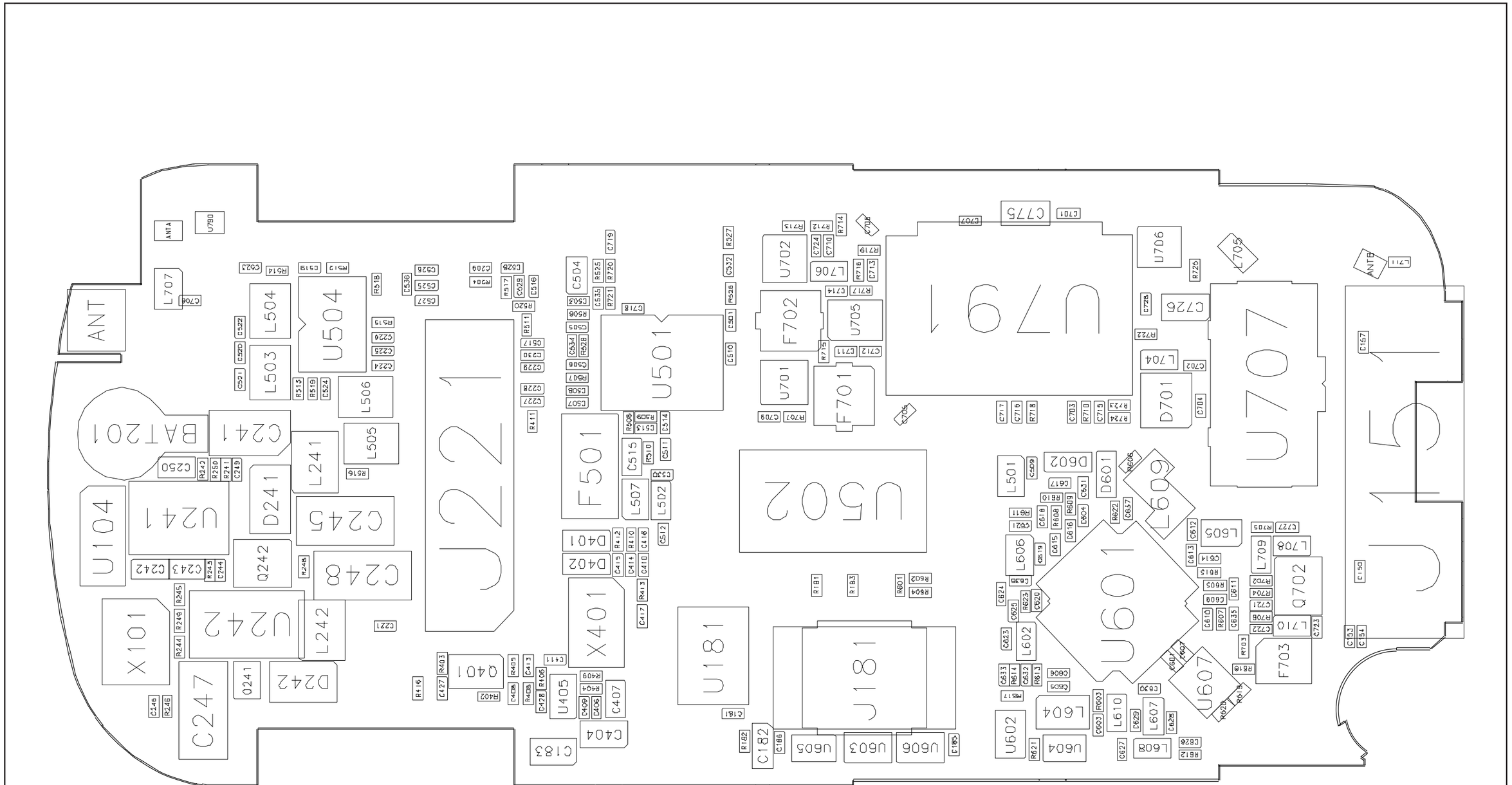
4. PCB Diagrams

4-1 Main PCB Top Diagram (Europe)

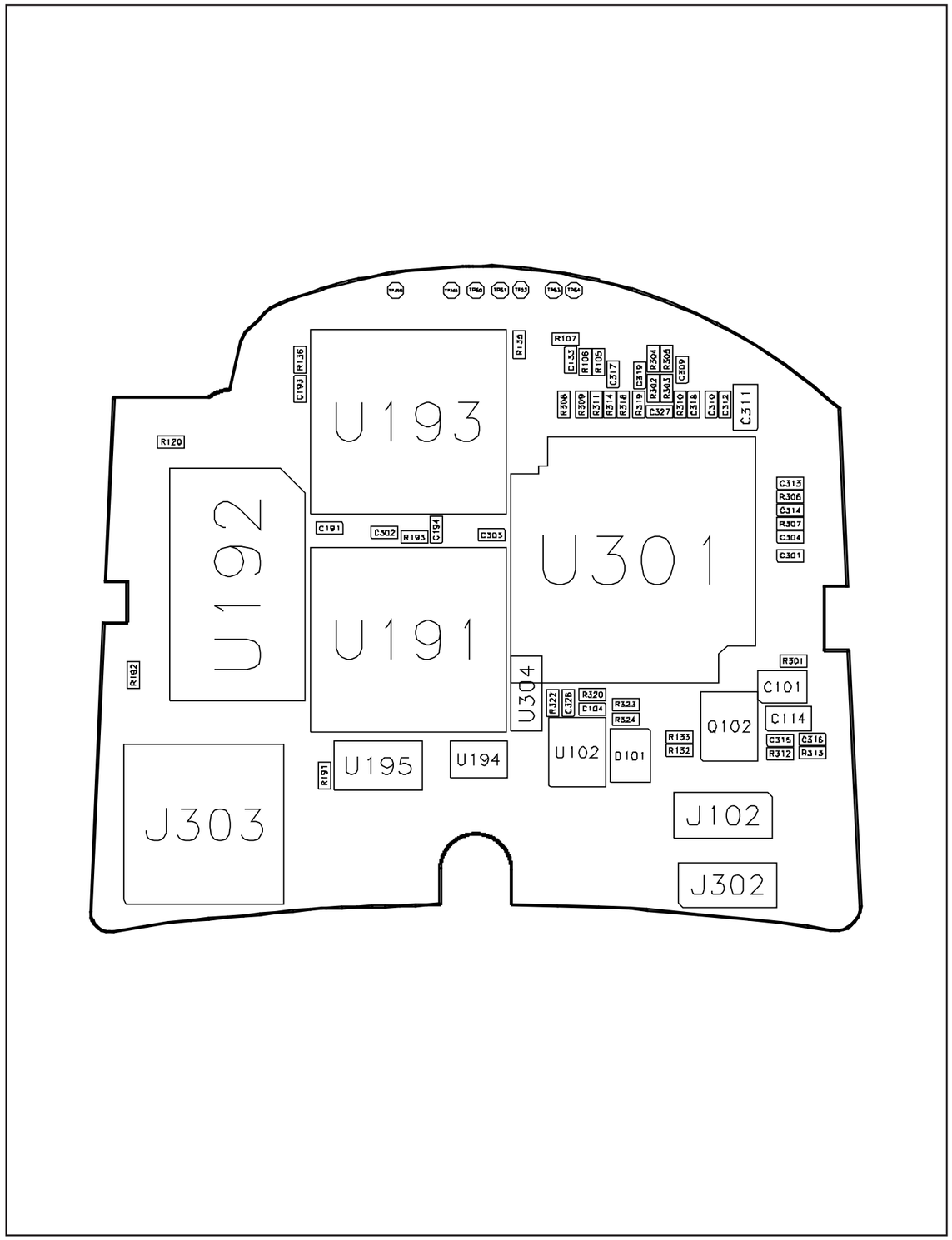
4-2 Main PCB Top Diagram (China)



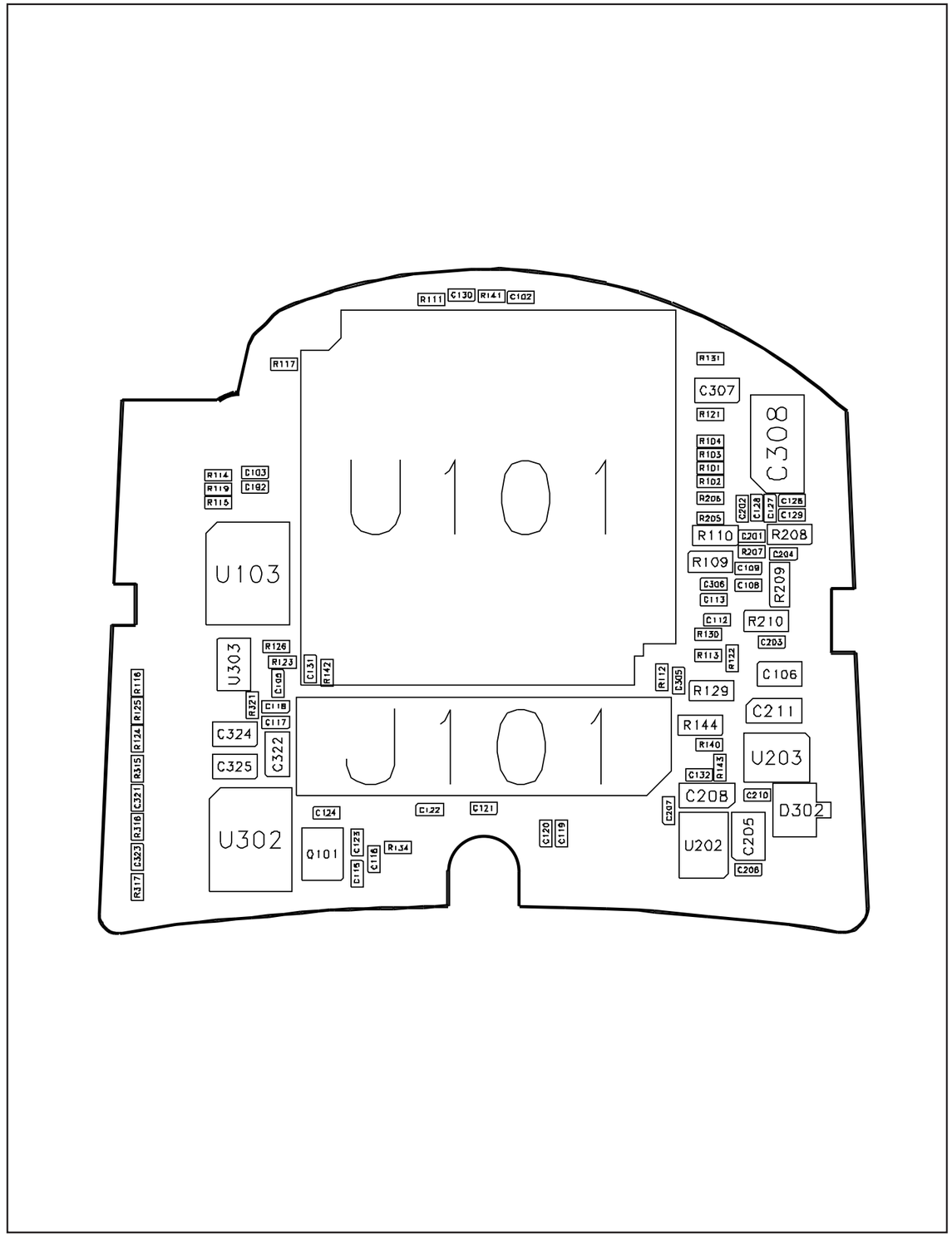
4-3 Main PCB Bottom Diagram



4-4 Memory PCB Top Diagram

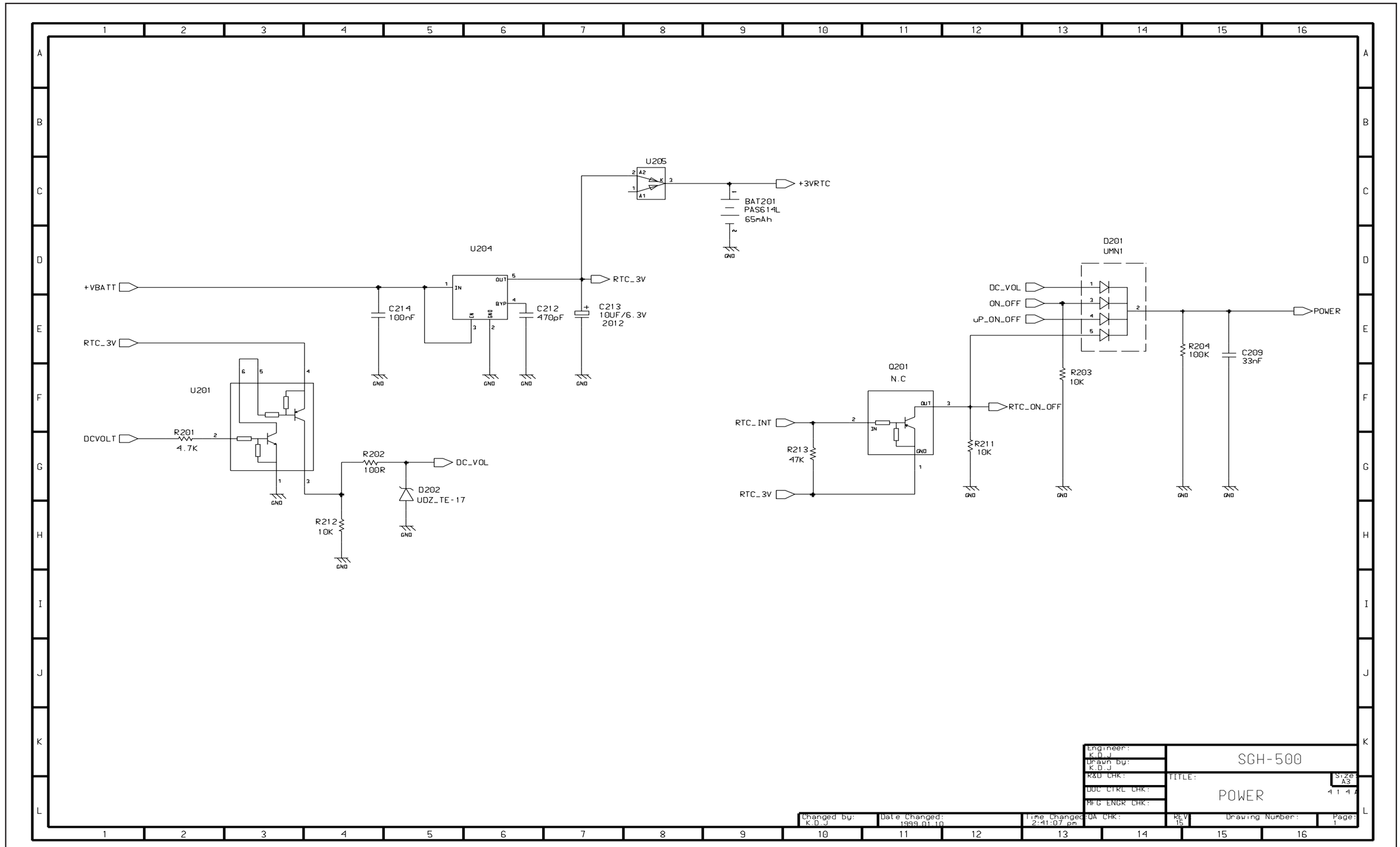


4-5 Memory PCB Bottom Diagram

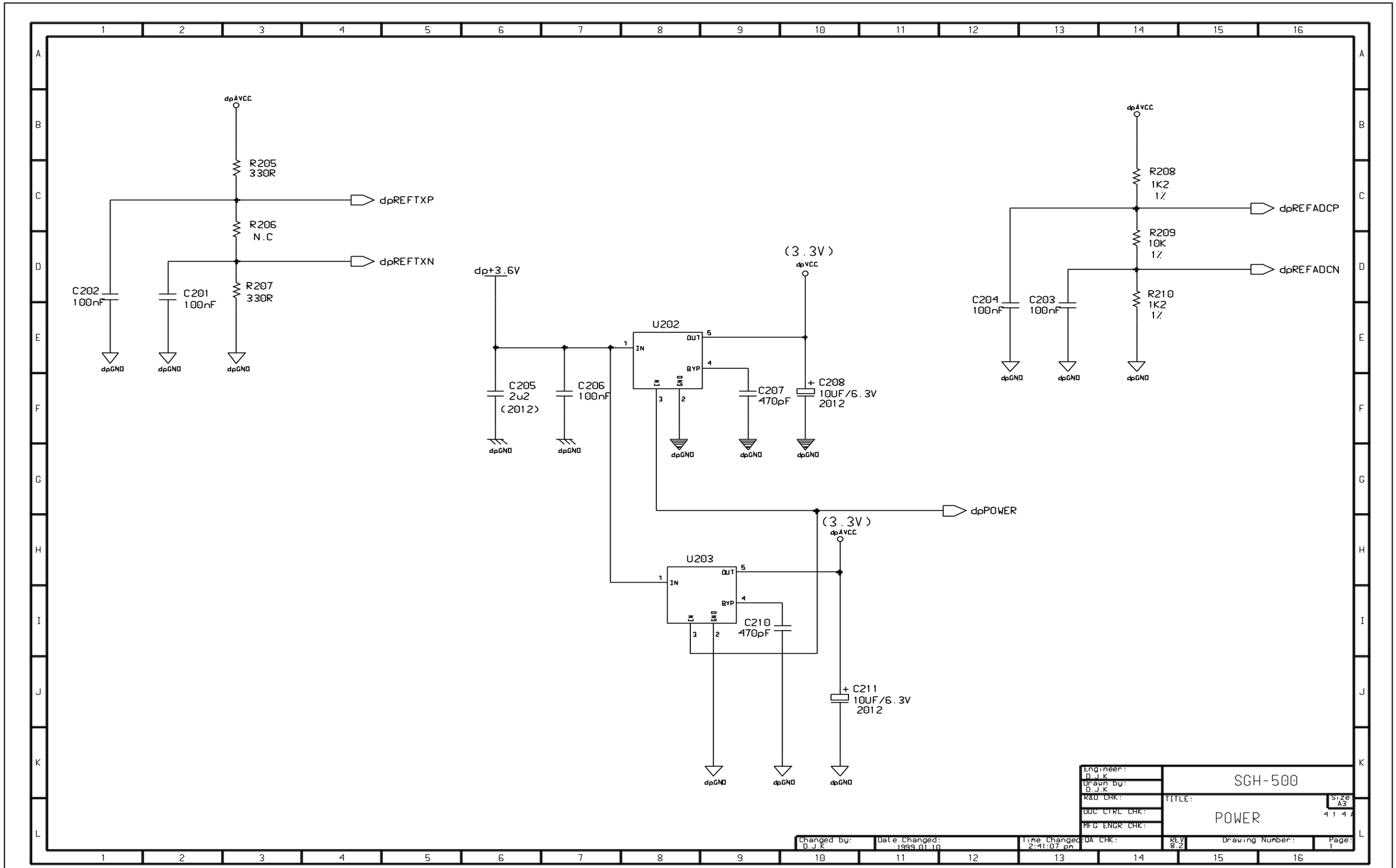


5. Schematic Diagrams

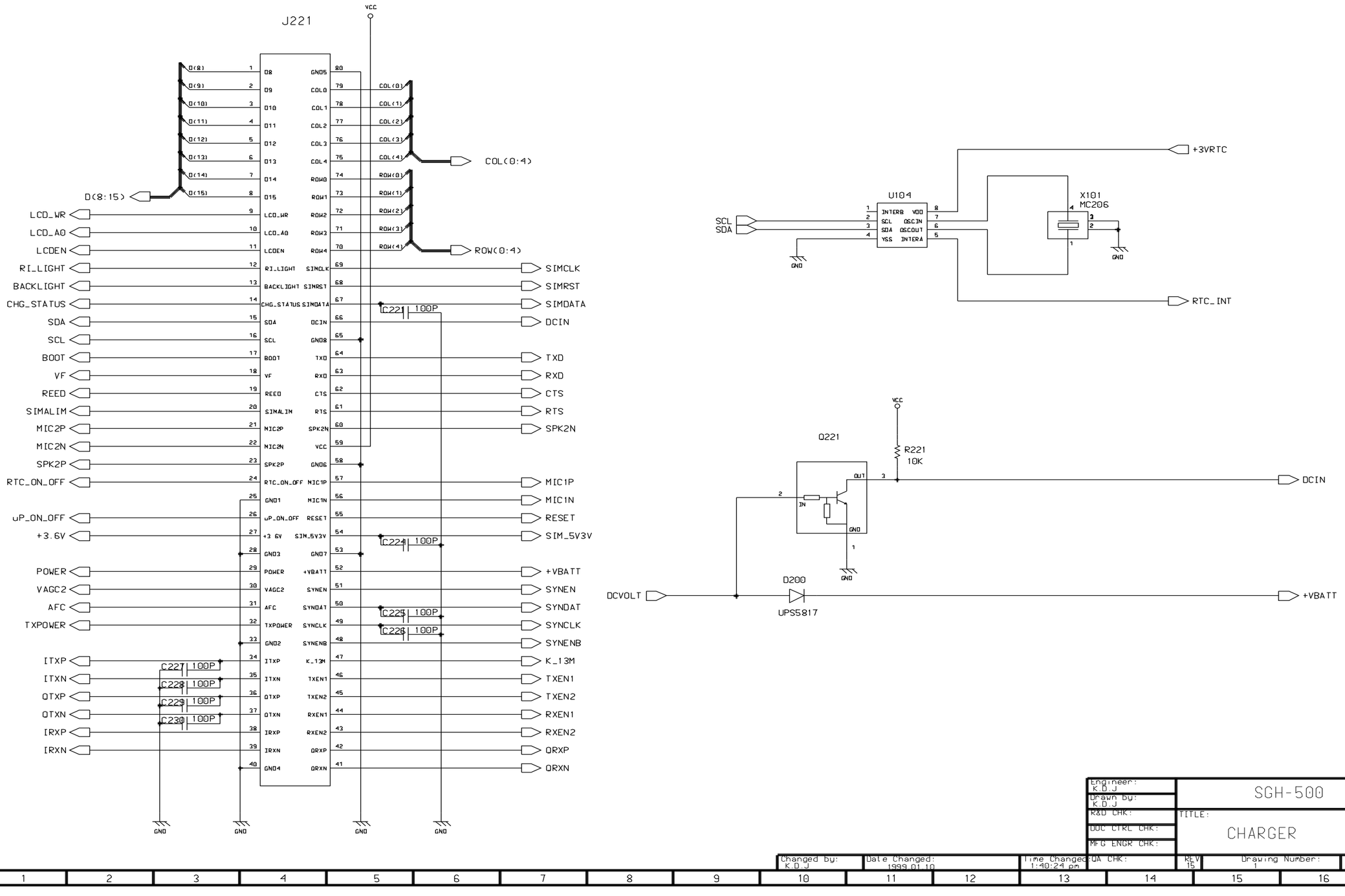
5-1 Main Power



5-2 Memory Power

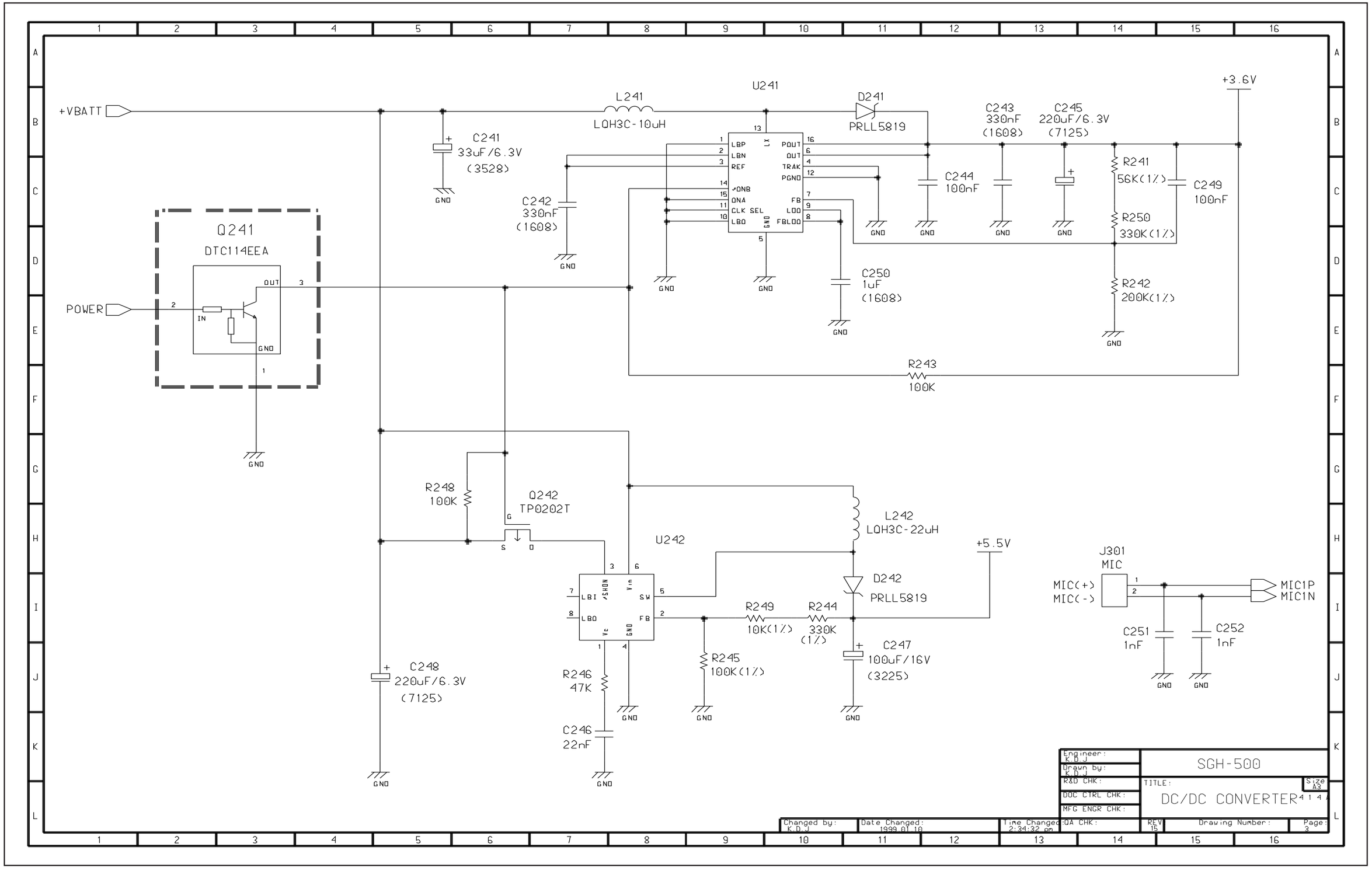


5-3 Charger

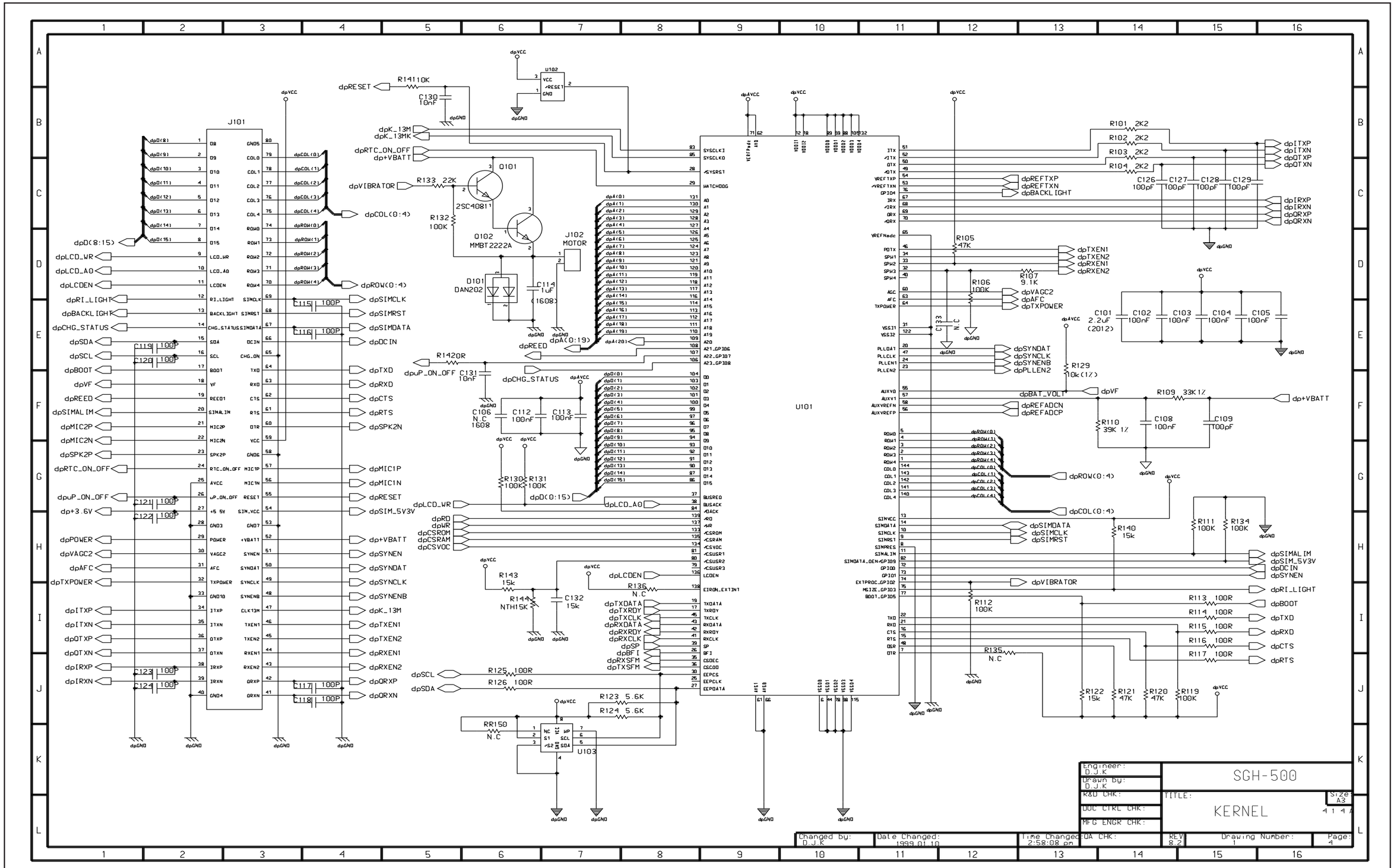


Engineer: K.D.J	SGH-500
Drawn by: K.D.J	
R&D CHK:	TITLE: CHARGER
DOC CTRL CHK:	Size: A3
MFG ENGR CHK:	4 1 4 A
QA CHK:	REV: 15
Changed by: K.D.J	Date Changed: 1999.01.10
Time Changed: 1:40:24 pm	Drawing Number: 1
	Page: 2

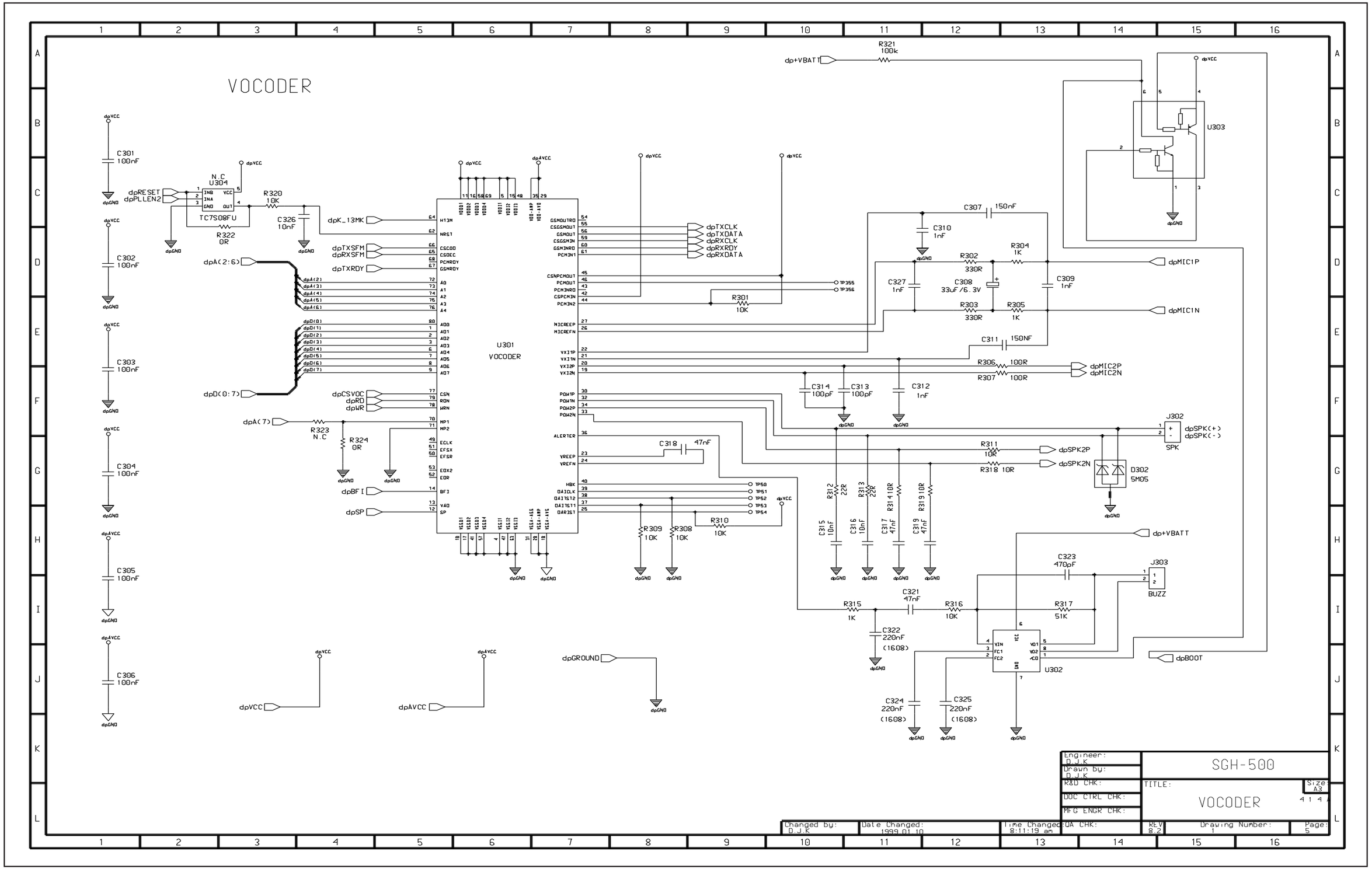
5-4 DC/DC Converter



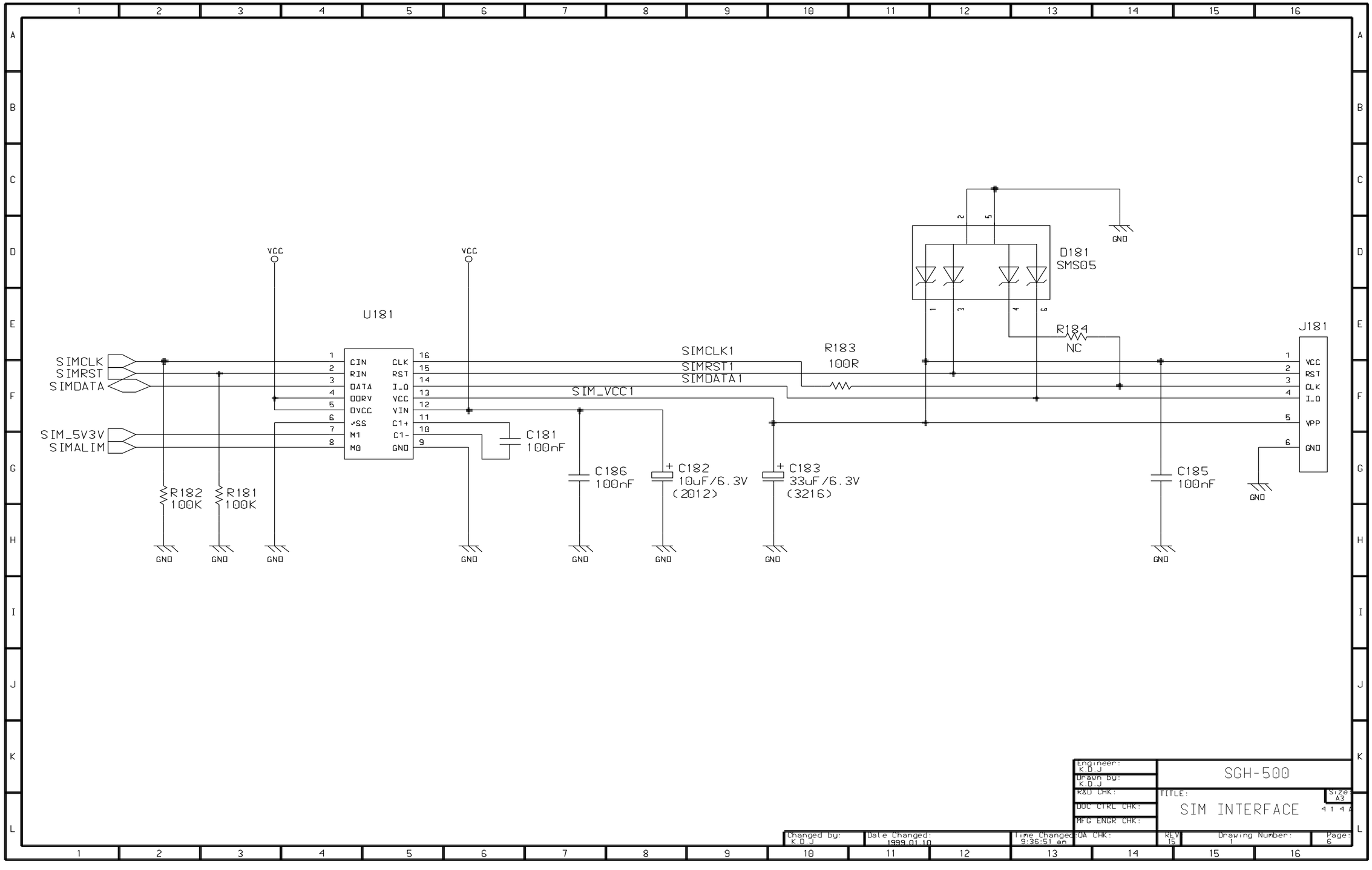
5-5 Memory Kernel



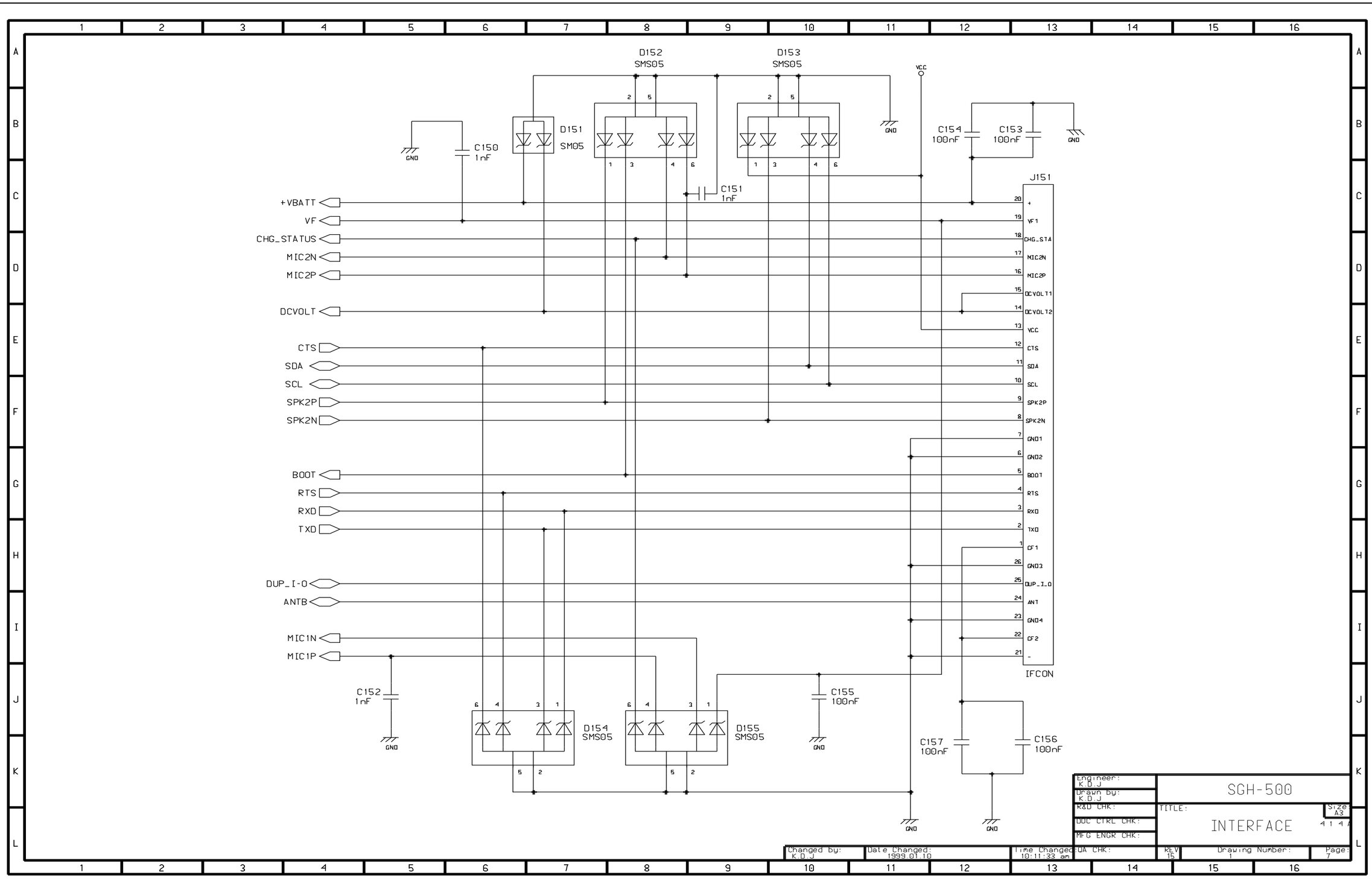
5-6 Vocoder


VOCODER
U301
VOCODER
U303
U302
J302
SPK
J303
BUZZ
D302
5M05
dpVCC
dpAVCC
dpGND
dpRESET
dpPLLEN2
dpK_13MK
dpTXSFM
dpRXSFM
dpTXRDY
dpA(2:6)
dpD(0:7)
dpCSVOC
dpRD
dpWR
dpA(7)
dpBFI
dpSP
dpTXCLK
dpTXDATA
dpRXCLK
dpRXRDY
dpRXDATA
dp+VBATT
dpMIC1P
dpMIC1N
dpMIC2P
dpMIC2N
dpSPK2P
dpSPK2N
dpSPK(+)
dpSPK(-)
dpBOOT
dpGROUND
N.C
TC7S08FU
R321 100k
R320 10K
R322 0R
R323 N.C
R324 0R
R301 10K
R302 330R
R303 330R
R304 1K
R305 1K
R306 100R
R307 100R
R309 10K
R308 10K
R310 10K
R311 10R
R318 10R
R312 22R
R313 22R
R314 10R
R319 10R
R315 1K
R316 10K
R317 51K
C301 100nF
C302 100nF
C303 100nF
C304 100nF
C305 100nF
C306 100nF
C307 150nF
C308 33uF/6.3V
C309 1nF
C310 1nF
C311 150NF
C312 1nF
C313 100pF
C314 100pF
C315 10nF
C316 10nF
C317 47nF
C318 47nF
C319 47nF
C321 47nF
C322 220nF (1608)
C323 470pF
C324 220nF (1608)
C325 220nF (1608)
C326 10nF
TP355
TP356
TP50
TP51
TP52
TP53
TP54
Engineer: D.J.K
Drawn by: D.J.K
R&D CHK:
DOC CTRL CHK:
MFG ENGR CHK:
QA CHK:
SGH-500
TITLE: VOCODER
Size: A3
Changed by: D.J.K
Date Changed: 1999.01.10
Time Changed: 8:11:19 am
REV: 8.2
Drawing Number: 1
Page: 5

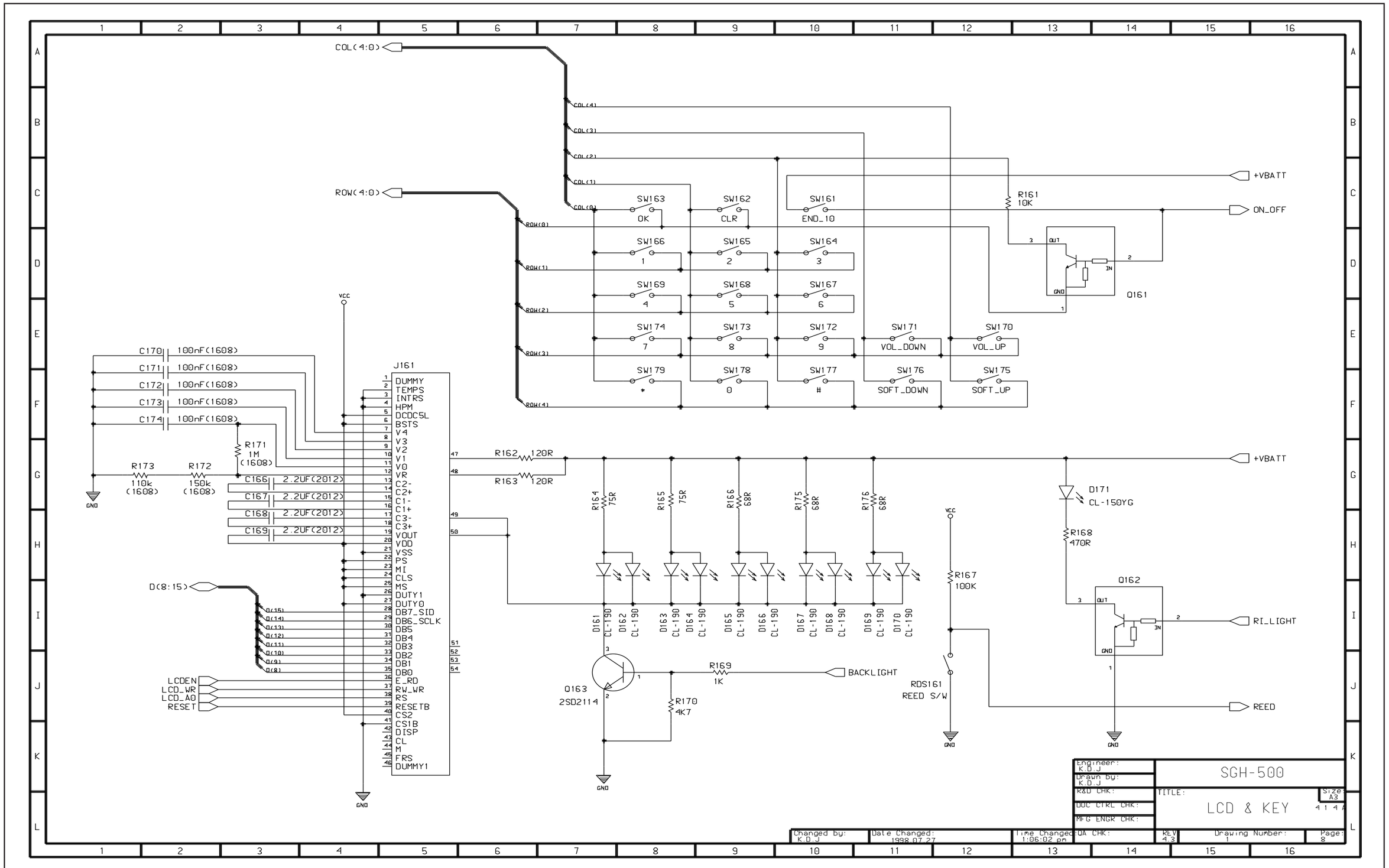
5-7 SIM Interface



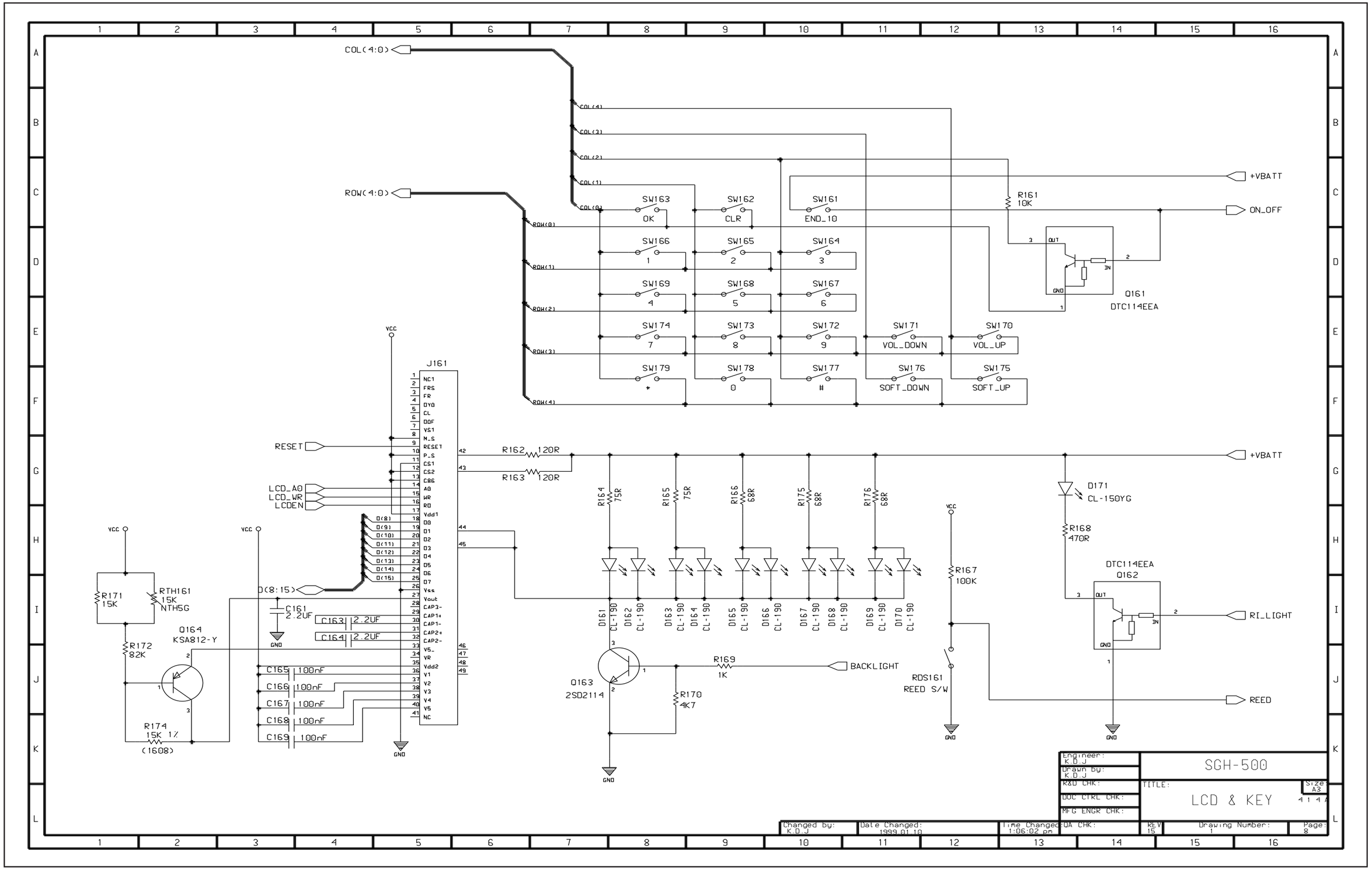
5-8 Interface



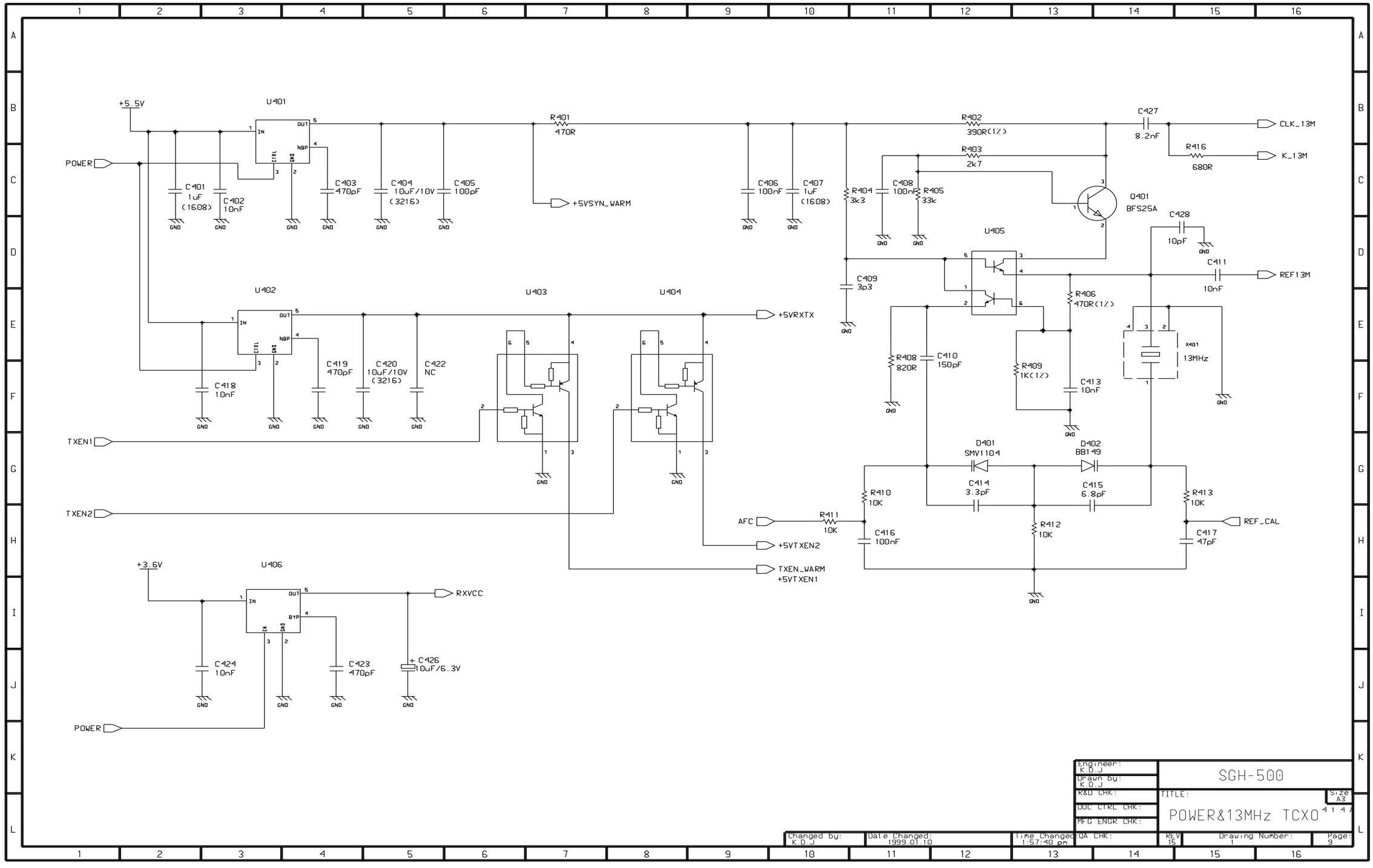
5-9 LCD & Key (China)



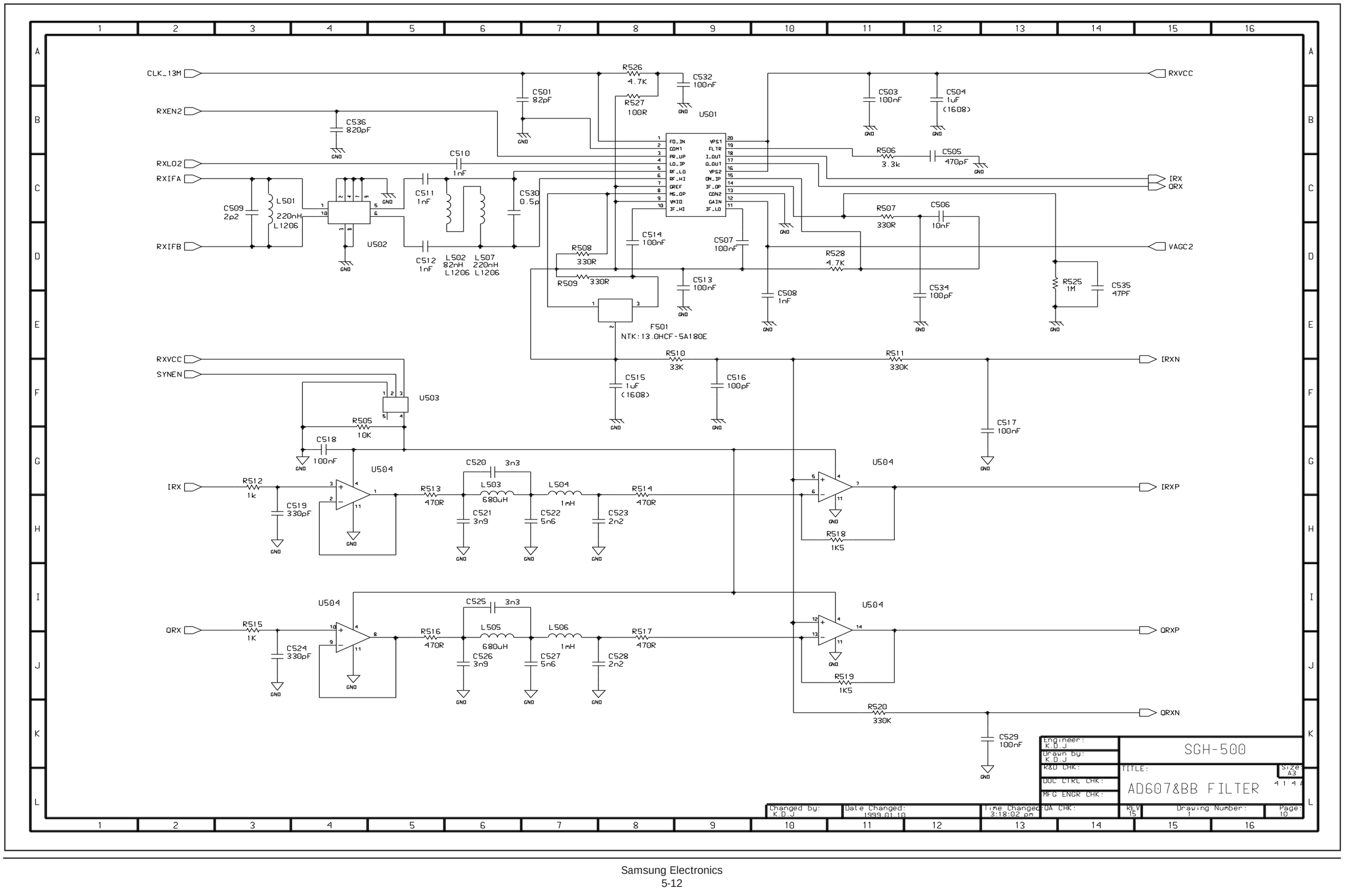
5-10 LCD & Key (Europe)



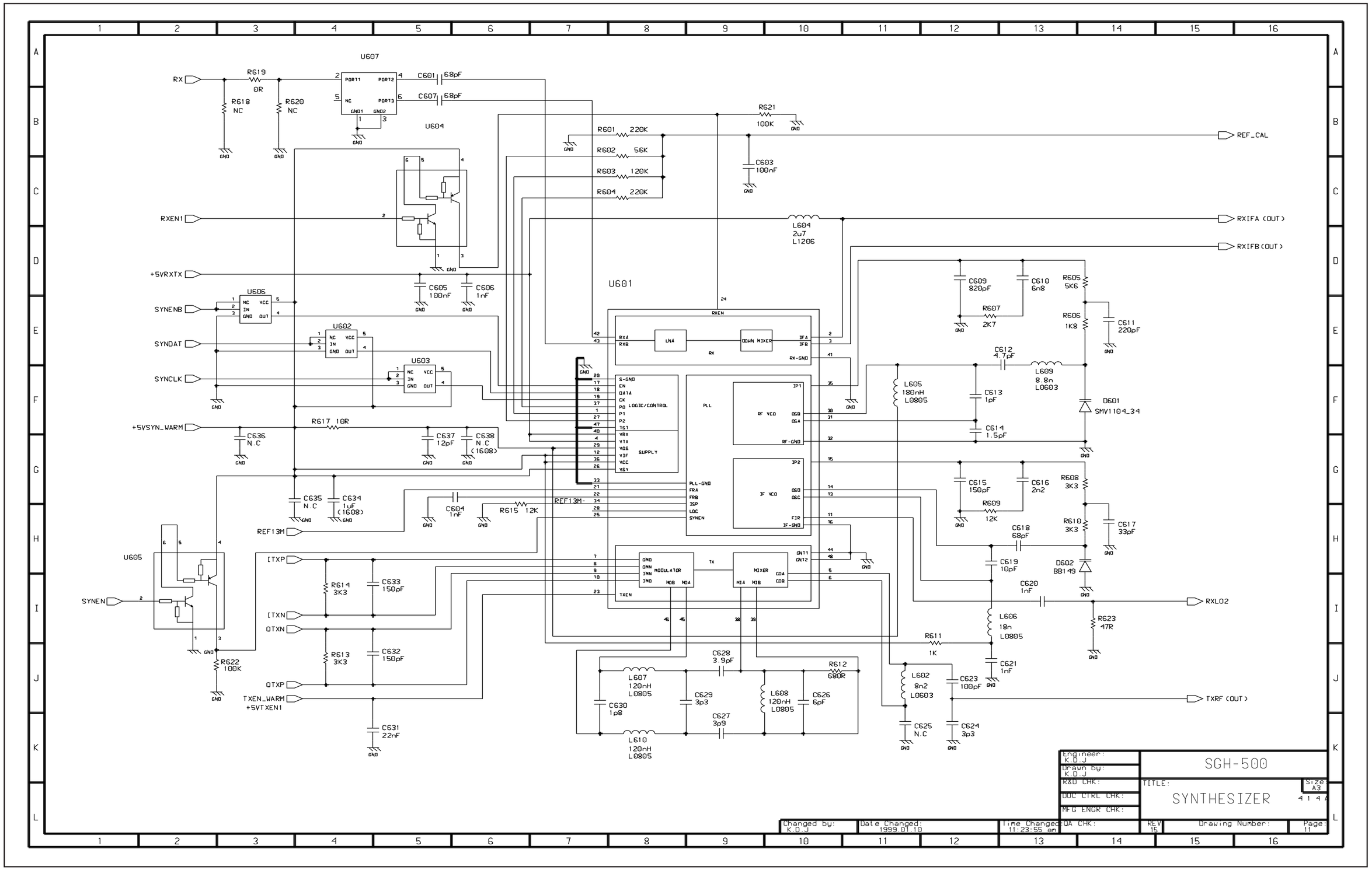
5-11 Power & 13 MHz TCXO



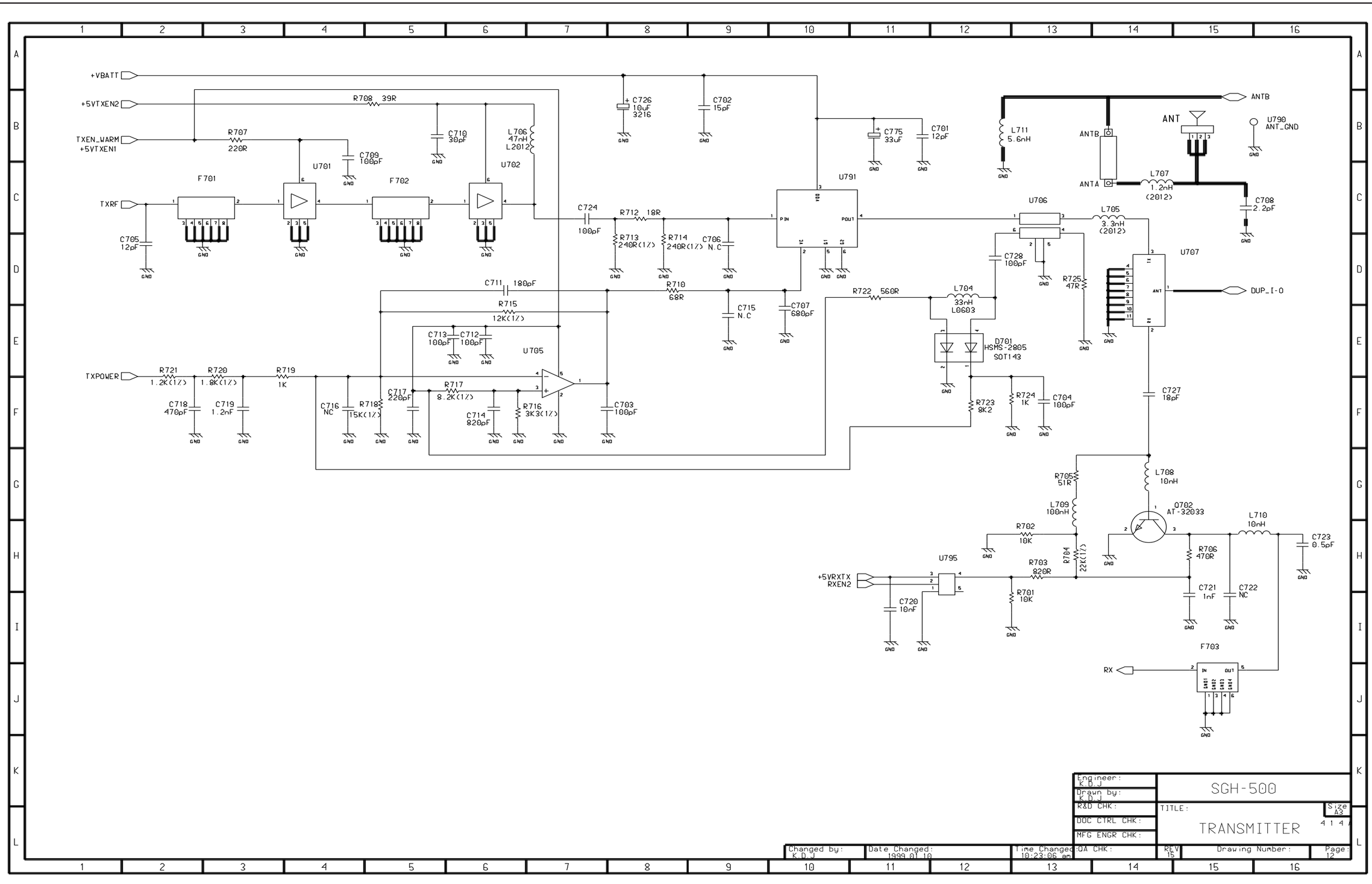
5-12 AD607 & BB Filter



5-13 Synthesizer



5-14 Transmitter



Engineer: K.D.J	SGH-500
Drawn by: K.D.J	
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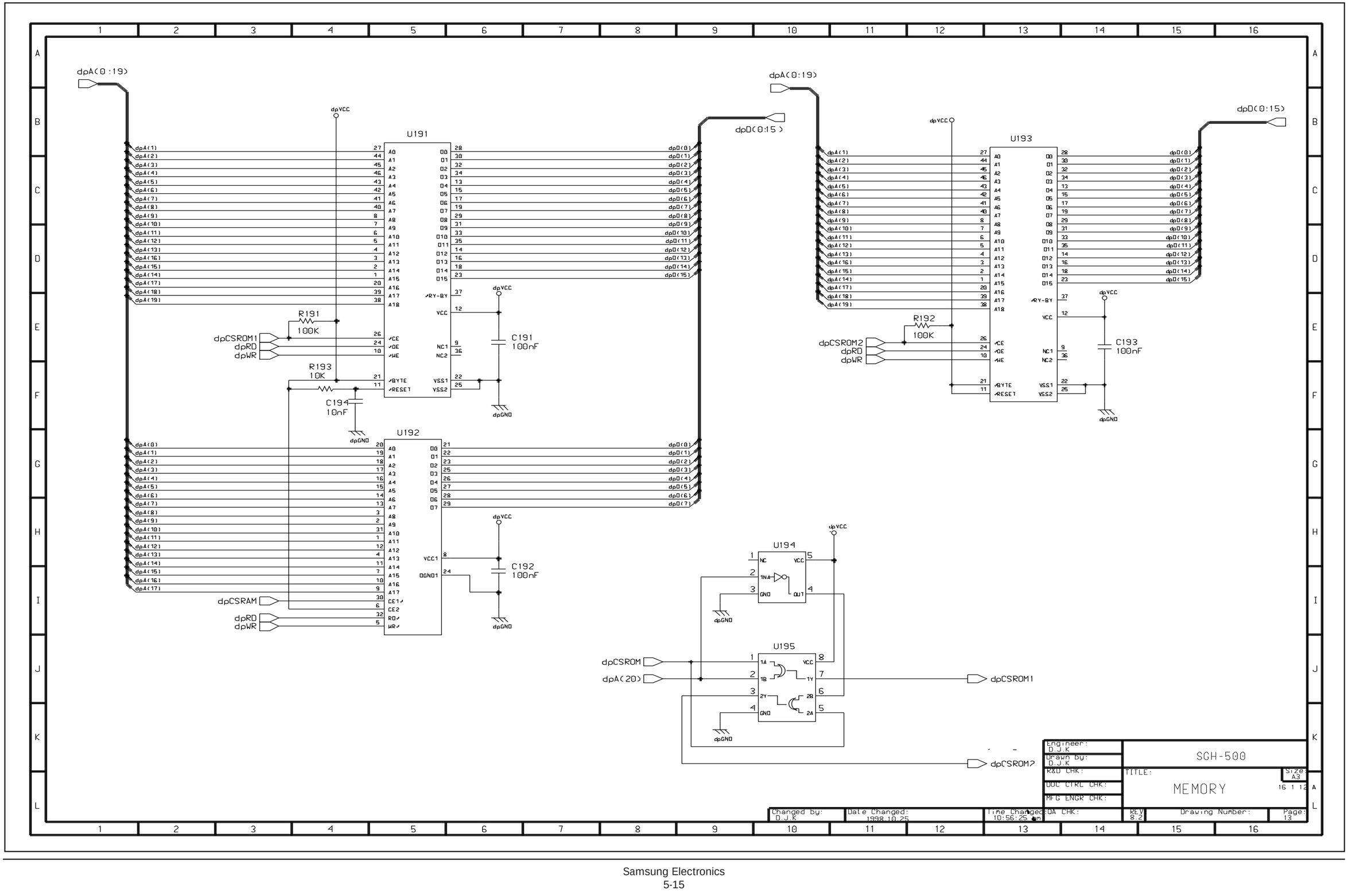
MFG ENGR CHK:	4 1 4
Changed by: K.D.J	Date Changed: 1999.01.10
Time Changed: 10:23:06 am	QA CHK:
REV 15	Drawing Number:
Page: 12	

5-15 Memory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dpD(0:15)
U191
U192
U193
U194
U195
dpVCC
dpGND
R191
100K
R192
100K
R193
10K
C191
100nF
C192
100nF
C193
100nF
C194
10nF
dpCSROM1
dpCSROM2
dpRD
dpWR
dpCSRAM
dpCSROM
dpA(20)
dpCSROM1
dpCSROM2
SGH-500
MEMORY
Engineer: D.J.K
Drawn by: D.J.K
R&D CHK:
DOC CTRL CHK:
MFG ENGR CHK:
Changed by: D.J.K
Date Changed: 1998.10.25
Time Changed: 10:56:25
QA CHK:
REV: 8.2
Drawing Number:
Page: 13
Size: A3